Full wwPDB X-ray Structure Validation Report

Mar 9, 2018 – 07:47 am GMT

PDB ID : 5GM1
Title : Crystal structure of methyltransferase TleD complexed with SAH
Deposited on : 2016-07-12
Resolution : 2.50 Å (reported)

This is a Full wwPDB X-ray Structure Validation Report for a publicly released PDB entry.

We welcome your comments at validation@mail.wwpdb.org
A user guide is available at https://www.wwpdb.org/validation/2017/XrayValidationReportHelp
with specific help available everywhere you see the i symbol.

The following versions of software and data (see references i) were used in the production of this report:

MolProbity : 4.02b-467
Mogul : 1.7.3 (157068), CSD as539be (2018)
Xtriage (Phenix) : 1.13
EDS : trunk30967
Percentile statistics : 20171227.v01 (using entries in the PDB archive December 27th 2017)
Refmac : 5.8.0158
CCP4 : 7.0 (Gargrove)
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : trunk30967
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

*X-RAY DIFFRACTION*

The reported resolution of this entry is 2.50 Å.

Percentile scores (ranging between 0-100) for global validation metrics of the entry are shown in the following graphic. The table shows the number of entries on which the scores are based.

The table below summarises the geometric issues observed across the polymeric chains and their fit to the electron density. The red, orange, yellow and green segments on the lower bar indicate the fraction of residues that contain outliers for $>3$, $2$, $1$ and $0$ types of geometric quality criteria. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions $\leq 5\%$ The upper red bar (where present) indicates the fraction of residues that have poor fit to the electron density. The numeric value is given above the bar.

<table>
<thead>
<tr>
<th>Metric</th>
<th>Whole archive (#Entries)</th>
<th>Similar resolution (#Entries, resolution range(Å))</th>
</tr>
</thead>
<tbody>
<tr>
<td>$R_{\text{free}}$</td>
<td>111664</td>
<td>4155 (2.50-2.50)</td>
</tr>
<tr>
<td>Clashscore</td>
<td>122126</td>
<td>4827 (2.50-2.50)</td>
</tr>
<tr>
<td>Ramachandran outliers</td>
<td>120053</td>
<td>4735 (2.50-2.50)</td>
</tr>
<tr>
<td>Sidechain outliers</td>
<td>120020</td>
<td>4737 (2.50-2.50)</td>
</tr>
<tr>
<td>RSRZ outliers</td>
<td>108989</td>
<td>4058 (2.50-2.50)</td>
</tr>
</tbody>
</table>

The upper red bar (where present) indicates the fraction of residues that have poor fit to the electron density. The numeric value is given above the bar.
The following table lists non-polymeric compounds, carbohydrate monomers and non-standard residues in protein, DNA, RNA chains that are outliers for geometric or electron-density-fit criteria:

<table>
<thead>
<tr>
<th>Mol</th>
<th>Type</th>
<th>Chain</th>
<th>Res</th>
<th>Chirality</th>
<th>Geometry</th>
<th>Clashes</th>
<th>Electron density</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>SAH</td>
<td>R</td>
<td>301</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
</tr>
</tbody>
</table>

Continued from previous page...

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Length</th>
<th>Quality of chain</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>G</td>
<td>297</td>
<td>9% 77% 14% 6%</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>297</td>
<td>16% 76% 16% 6%</td>
</tr>
<tr>
<td>1</td>
<td>I</td>
<td>297</td>
<td>5% 84% 9% 6%</td>
</tr>
<tr>
<td>1</td>
<td>J</td>
<td>297</td>
<td>6% 81% 13% 5%</td>
</tr>
<tr>
<td>1</td>
<td>K</td>
<td>297</td>
<td>4% 82% 12% 5%</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>297</td>
<td>8% 81% 12% 6%</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>297</td>
<td>8% 80% 14% 5%</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>297</td>
<td>26% 81% 12% 5%</td>
</tr>
<tr>
<td>1</td>
<td>O</td>
<td>297</td>
<td>4% 77% 16% 6%</td>
</tr>
<tr>
<td>1</td>
<td>P</td>
<td>297</td>
<td>6% 81% 12% 6%</td>
</tr>
<tr>
<td>1</td>
<td>Q</td>
<td>297</td>
<td>18% 81% 13% 5%</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>297</td>
<td>40% 66% 27% 5%</td>
</tr>
</tbody>
</table>
## 2 Entry composition

There are 3 unique types of molecules in this entry. The entry contains 40182 atoms, of which 0 are hydrogens and 0 are deuteriums.

In the tables below, the ZeroOcc column contains the number of atoms modelled with zero occupancy, the AltConf column contains the number of residues with at least one atom in alternate conformation and the Trace column contains the number of residues modelled with at most 2 atoms.

- Molecule 1 is a protein called O-methyltransferase.

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Residues</th>
<th>Atoms</th>
<th>ZeroOcc</th>
<th>AltConf</th>
<th>Trace</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A</td>
<td>281</td>
<td>Total C 184 N 1384 O 371 S 417</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>280</td>
<td>Total C 164 N 1372 O 367 S 414</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>280</td>
<td>Total C 2157 N 1370 O 365 S 411</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>280</td>
<td>Total C 2169 N 1375 O 370 S 413</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>279</td>
<td>Total C 2149 N 1364 O 364 S 410</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>280</td>
<td>Total C 2158 N 1369 O 366 S 412</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>280</td>
<td>Total C 2158 N 1369 O 366 S 412</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>279</td>
<td>Total C 2149 N 1364 O 364 S 410</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>I</td>
<td>280</td>
<td>Total C 2169 N 1375 O 370 S 413</td>
<td>3</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>J</td>
<td>281</td>
<td>Total C 2167 N 1374 O 368 S 414</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>K</td>
<td>281</td>
<td>Total C 2166 N 1375 O 367 S 413</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>280</td>
<td>Total C 2158 N 1369 O 366 S 412</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>281</td>
<td>Total C 2184 N 1384 O 371 S 417</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>281</td>
<td>Total C 2184 N 1384 O 371 S 417</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>O</td>
<td>280</td>
<td>Total C 2158 N 1369 O 366 S 412</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>P</td>
<td>280</td>
<td>Total C 2158 N 1369 O 366 S 412</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
Continued from previous page...

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Residues</th>
<th>Atoms</th>
<th>ZeroOcc</th>
<th>AltConf</th>
<th>Trace</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Q</td>
<td>281</td>
<td>Total C N O S</td>
<td>2184 1384 371 417 12</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>281</td>
<td>Total C N O S</td>
<td>2176 1379 370 416 11</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

There are 144 discrepancies between the modelled and reference sequences:

<table>
<thead>
<tr>
<th>Chain</th>
<th>Residue</th>
<th>Modelled</th>
<th>Actual</th>
<th>Comment</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>290</td>
<td>LEU</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>A</td>
<td>291</td>
<td>GLU</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>A</td>
<td>292</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>A</td>
<td>293</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>A</td>
<td>294</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>A</td>
<td>295</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>A</td>
<td>296</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>A</td>
<td>297</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>B</td>
<td>290</td>
<td>LEU</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>B</td>
<td>291</td>
<td>GLU</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>B</td>
<td>292</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>B</td>
<td>293</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>B</td>
<td>294</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>B</td>
<td>295</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>B</td>
<td>296</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>B</td>
<td>297</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>C</td>
<td>290</td>
<td>LEU</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>C</td>
<td>291</td>
<td>GLU</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>C</td>
<td>292</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>C</td>
<td>293</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>C</td>
<td>294</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>C</td>
<td>295</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>C</td>
<td>296</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>C</td>
<td>297</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>D</td>
<td>290</td>
<td>LEU</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>D</td>
<td>291</td>
<td>GLU</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>D</td>
<td>292</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>D</td>
<td>293</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>D</td>
<td>294</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>D</td>
<td>295</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>D</td>
<td>296</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>D</td>
<td>297</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>E</td>
<td>290</td>
<td>LEU</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>E</td>
<td>291</td>
<td>GLU</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
</tbody>
</table>

Continued on next page...
<table>
<thead>
<tr>
<th>Chain</th>
<th>Residue</th>
<th>Modelled</th>
<th>Actual</th>
<th>Comment</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>E</td>
<td>292</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>E</td>
<td>293</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>E</td>
<td>294</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>E</td>
<td>295</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>E</td>
<td>296</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>E</td>
<td>297</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>F</td>
<td>290</td>
<td>LEU</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>F</td>
<td>291</td>
<td>GLU</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>F</td>
<td>292</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>F</td>
<td>293</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>F</td>
<td>294</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>F</td>
<td>295</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>F</td>
<td>296</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>F</td>
<td>297</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>G</td>
<td>290</td>
<td>LEU</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>G</td>
<td>291</td>
<td>GLU</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>G</td>
<td>292</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>G</td>
<td>293</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>G</td>
<td>294</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>G</td>
<td>295</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>G</td>
<td>296</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>G</td>
<td>297</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>H</td>
<td>290</td>
<td>LEU</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>H</td>
<td>291</td>
<td>GLU</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>H</td>
<td>292</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>H</td>
<td>293</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>H</td>
<td>294</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>H</td>
<td>295</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>H</td>
<td>296</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>H</td>
<td>297</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>I</td>
<td>290</td>
<td>LEU</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>I</td>
<td>291</td>
<td>GLU</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>I</td>
<td>292</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>I</td>
<td>293</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>I</td>
<td>294</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>I</td>
<td>295</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>I</td>
<td>296</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>I</td>
<td>297</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>J</td>
<td>290</td>
<td>LEU</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>J</td>
<td>291</td>
<td>GLU</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>J</td>
<td>292</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>J</td>
<td>293</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
</tbody>
</table>
Continued from previous page...

<table>
<thead>
<tr>
<th>Chain</th>
<th>Residue</th>
<th>Modelled</th>
<th>Actual</th>
<th>Comment</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>J</td>
<td>294</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>J</td>
<td>295</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>J</td>
<td>296</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>J</td>
<td>297</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>K</td>
<td>290</td>
<td>LEU</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>K</td>
<td>291</td>
<td>GLU</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>K</td>
<td>292</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>K</td>
<td>293</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>K</td>
<td>294</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>K</td>
<td>295</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>K</td>
<td>296</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>K</td>
<td>297</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>L</td>
<td>290</td>
<td>LEU</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>L</td>
<td>291</td>
<td>GLU</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>L</td>
<td>292</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>L</td>
<td>293</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>L</td>
<td>294</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>L</td>
<td>295</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>L</td>
<td>296</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>L</td>
<td>297</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>M</td>
<td>290</td>
<td>LEU</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>M</td>
<td>291</td>
<td>GLU</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>M</td>
<td>292</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>M</td>
<td>293</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>M</td>
<td>294</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>M</td>
<td>295</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>M</td>
<td>296</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>M</td>
<td>297</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>N</td>
<td>290</td>
<td>LEU</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>N</td>
<td>291</td>
<td>GLU</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>N</td>
<td>292</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>N</td>
<td>293</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>N</td>
<td>294</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>N</td>
<td>295</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>N</td>
<td>296</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>N</td>
<td>297</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>O</td>
<td>290</td>
<td>LEU</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>O</td>
<td>291</td>
<td>GLU</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>O</td>
<td>292</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>O</td>
<td>293</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>O</td>
<td>294</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>O</td>
<td>295</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
</tbody>
</table>

Continued on next page...
Continued from previous page...

<table>
<thead>
<tr>
<th>Chain</th>
<th>Residue</th>
<th>Modelled</th>
<th>Actual</th>
<th>Comment</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>O</td>
<td>296</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>O</td>
<td>297</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>P</td>
<td>290</td>
<td>LEU</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>P</td>
<td>291</td>
<td>GLU</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>P</td>
<td>292</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>P</td>
<td>293</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>P</td>
<td>294</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>P</td>
<td>295</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>P</td>
<td>296</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>P</td>
<td>297</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>Q</td>
<td>290</td>
<td>LEU</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>Q</td>
<td>291</td>
<td>GLU</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>Q</td>
<td>292</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>Q</td>
<td>293</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>Q</td>
<td>294</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>Q</td>
<td>295</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>Q</td>
<td>296</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>Q</td>
<td>297</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>R</td>
<td>290</td>
<td>LEU</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>R</td>
<td>291</td>
<td>GLU</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>R</td>
<td>292</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>R</td>
<td>293</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>R</td>
<td>294</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>R</td>
<td>295</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>R</td>
<td>296</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
<tr>
<td>R</td>
<td>297</td>
<td>HIS</td>
<td>-</td>
<td>expression tag</td>
<td>UNP A0A077K7L1</td>
</tr>
</tbody>
</table>

- Molecule 2 is S-ADENOSYL-L-HOMOCYTEINE (three-letter code: SAH) (formula: C_{14}H_{20}N_{6}O_{5}S).
<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Residues</th>
<th>Atoms</th>
<th>ZeroOcc</th>
<th>AltConf</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>A</td>
<td>1</td>
<td>Total C N O S 26 14 6 5 1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>1</td>
<td>Total C N O S 26 14 6 5 1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>1</td>
<td>Total C N O S 26 14 6 5 1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>C</td>
<td>1</td>
<td>Total C N O S 26 14 6 5 1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>D</td>
<td>1</td>
<td>Total C N O S 26 14 6 5 1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>E</td>
<td>1</td>
<td>Total C N O S 26 14 6 5 1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>F</td>
<td>1</td>
<td>Total C N O S 26 14 6 5 1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>G</td>
<td>1</td>
<td>Total C N O S 26 14 6 5 1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>H</td>
<td>1</td>
<td>Total C N O S 26 14 6 5 1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>I</td>
<td>1</td>
<td>Total C N O S 26 14 6 5 1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>J</td>
<td>1</td>
<td>Total C N O S 26 14 6 5 1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>K</td>
<td>1</td>
<td>Total C N O S 26 14 6 5 1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>L</td>
<td>1</td>
<td>Total C N O S 26 14 6 5 1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>M</td>
<td>1</td>
<td>Total C N O S 26 14 6 5 1</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Continued on next page...
Continued from previous page...

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Residues</th>
<th>Atoms</th>
<th>ZeroOcc</th>
<th>AltConf</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>N</td>
<td>1</td>
<td>Total C N O S</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>26 14 6 5 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>O</td>
<td>1</td>
<td>Total C N O S</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>26 14 6 5 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>P</td>
<td>1</td>
<td>Total C N O S</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>26 14 6 5 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Q</td>
<td>1</td>
<td>Total C N O S</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>26 14 6 5 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>R</td>
<td>1</td>
<td>Total C N O S</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>26 14 6 5 1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Molecule 3 is water.

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Residues</th>
<th>Atoms</th>
<th>ZeroOcc</th>
<th>AltConf</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>A</td>
<td>81</td>
<td>Total O</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>81 81</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>B</td>
<td>90</td>
<td>Total O</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>90 90</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>C</td>
<td>51</td>
<td>Total O</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>51 51</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>D</td>
<td>35</td>
<td>Total O</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>35 35</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>E</td>
<td>48</td>
<td>Total O</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>48 48</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>F</td>
<td>72</td>
<td>Total O</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>72 72</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>G</td>
<td>22</td>
<td>Total O</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>22 22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>H</td>
<td>19</td>
<td>Total O</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>19 19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>I</td>
<td>46</td>
<td>Total O</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>46 46</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>J</td>
<td>21</td>
<td>Total O</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>21 21</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>K</td>
<td>11</td>
<td>Total O</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>11 11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>L</td>
<td>21</td>
<td>Total O</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>21 21</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>M</td>
<td>28</td>
<td>Total O</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>28 28</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>N</td>
<td>19</td>
<td>Total O</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>19 19</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Continued on next page...
Continued from previous page...

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Residues</th>
<th>Atoms</th>
<th>ZeroOcc</th>
<th>AltConf</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>O</td>
<td>38</td>
<td>Total O</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>38 38</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>P</td>
<td>25</td>
<td>Total O</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>25 25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Q</td>
<td>24</td>
<td>Total O</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>24 24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>R</td>
<td>45</td>
<td>Total O</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>45 45</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
3 Residue-property plots

These plots are drawn for all protein, RNA and DNA chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and electron density. Residues are color-coded according to the number of geometric quality criteria for which they contain at least one outlier: green = 0, yellow = 1, orange = 2 and red = 3 or more. A red dot above a residue indicates a poor fit to the electron density (RSRZ > 2). Stretches of 2 or more consecutive residues without any outlier are shown as a green connector. Residues present in the sample, but not in the model, are shown in grey.

- Molecule 1: O-methyltransferase

Chain A:

- Molecule 1: O-methyltransferase

Chain B:

- Molecule 1: O-methyltransferase

Chain C:

- Molecule 1: O-methyltransferase

Chain D:
• Molecule 1: O-methyltransferase

Chain E:

• Molecule 1: O-methyltransferase

Chain F:

• Molecule 1: O-methyltransferase

Chain G:

• Molecule 1: O-methyltransferase

Chain H:
• Molecule 1: O-methyltransferase

Chain I:

• Molecule 1: O-methyltransferase

Chain J:

• Molecule 1: O-methyltransferase

Chain K:

• Molecule 1: O-methyltransferase

Chain L:

• Molecule 1: O-methyltransferase
Chain M:

• Molecule 1: O-methyltransferase

Chain N:

• Molecule 1: O-methyltransferase

Chain O:

• Molecule 1: O-methyltransferase

Chain P:

• Molecule 1: O-methyltransferase
Chain Q:

- Molecule 1: O-methyltransferase

Chain R:
4  Data and refinement statistics

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Space group</td>
<td>C 1 2 1</td>
<td>Depositor</td>
</tr>
<tr>
<td>Cell constants</td>
<td>259.62Å, 152.90Å, 154.79Å</td>
<td>Depositor</td>
</tr>
<tr>
<td>a, b, c, α, β, γ</td>
<td>90.00°, 93.33°, 90.00°</td>
<td>Depositor</td>
</tr>
<tr>
<td>Resolution (Å)</td>
<td>102.27 – 2.50</td>
<td>Depositor</td>
</tr>
<tr>
<td></td>
<td>154.53 – 2.50</td>
<td>EDS</td>
</tr>
<tr>
<td>% Data completeness</td>
<td>99.0 (102.27-2.50)</td>
<td>Depositor</td>
</tr>
<tr>
<td>(in resolution range)</td>
<td>99.0 (154.53-2.50)</td>
<td>EDS</td>
</tr>
<tr>
<td>R&lt;sub&gt;merge&lt;/sub&gt;</td>
<td>0.08</td>
<td>Depositor</td>
</tr>
<tr>
<td>R&lt;sub&gt;sym&lt;/sub&gt;</td>
<td>(Not available)</td>
<td>Depositor</td>
</tr>
<tr>
<td>&lt;I/σ(I)&gt;&lt;sup&gt;1&lt;/sup&gt;</td>
<td>2.54 (at 2.52Å)</td>
<td>Xtriage</td>
</tr>
<tr>
<td>Refinement program</td>
<td>PHENIX (1.10.1_2155: ???)</td>
<td>Depositor</td>
</tr>
<tr>
<td>R, R&lt;sub&gt;free&lt;/sub&gt;</td>
<td>0.207, 0.248</td>
<td>Depositor</td>
</tr>
<tr>
<td></td>
<td>0.208, 0.249</td>
<td>DCC</td>
</tr>
<tr>
<td>R&lt;sub&gt;free&lt;/sub&gt; test set</td>
<td>10316 reflections (5.01%)</td>
<td>wwPDB-VP</td>
</tr>
<tr>
<td>Wilson B-factor (Å&lt;sup&gt;2&lt;/sup&gt;)</td>
<td>46.4</td>
<td>Xtriage</td>
</tr>
<tr>
<td>Anisotropy</td>
<td>0.291</td>
<td>Xtriage</td>
</tr>
<tr>
<td>Bulk solvent k&lt;sub&gt;sol&lt;/sub&gt;(e/Å&lt;sup&gt;3&lt;/sup&gt;), B&lt;sub&gt;sol&lt;/sub&gt;(Å&lt;sup&gt;2&lt;/sup&gt;)</td>
<td>0.35, 58.4</td>
<td>EDS</td>
</tr>
<tr>
<td>L-test for twinning&lt;sup&gt;2&lt;/sup&gt;</td>
<td>&lt;</td>
<td>L</td>
</tr>
<tr>
<td>Estimated twinning fraction</td>
<td>No twinning to report.</td>
<td>Xtriage</td>
</tr>
<tr>
<td>F&lt;sub&gt;o&lt;/sub&gt;, F&lt;sub&gt;c&lt;/sub&gt; correlation</td>
<td>0.94</td>
<td>EDS</td>
</tr>
<tr>
<td>Total number of atoms</td>
<td>40182</td>
<td>wwPDB-VP</td>
</tr>
<tr>
<td>Average B, all atoms (Å&lt;sup&gt;2&lt;/sup&gt;)</td>
<td>74.0</td>
<td>wwPDB-VP</td>
</tr>
</tbody>
</table>

Xtriage’s analysis on translational NCS is as follows: The largest off-origin peak in the Patterson function is 2.27% of the height of the origin peak. No significant pseudotranslation is detected.

---

<sup>1</sup>Intensities estimated from amplitudes.

<sup>2</sup>Theoretical values of <|L|>, <L<sup>2</sup>> for acentric reflections are 0.5, 0.333 respectively for untwinned datasets, and 0.375, 0.2 for perfectly twinned datasets.
5  Model quality

5.1  Standard geometry

Bond lengths and bond angles in the following residue types are not validated in this section: SAH

The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with \(|Z| > 5\) is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Bond lengths</th>
<th>Bond angles</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>RMSZ</td>
<td>#</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>0.29</td>
<td>0/2229</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>0.28</td>
<td>0/2209</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>0.28</td>
<td>0/2202</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>0.27</td>
<td>0/2214</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>0.28</td>
<td>0/2194</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>0.28</td>
<td>0/2203</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>0.26</td>
<td>0/2203</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>0.27</td>
<td>0/2194</td>
</tr>
<tr>
<td>1</td>
<td>I</td>
<td>0.27</td>
<td>0/2214</td>
</tr>
<tr>
<td>1</td>
<td>J</td>
<td>0.27</td>
<td>0/2212</td>
</tr>
<tr>
<td>1</td>
<td>K</td>
<td>0.26</td>
<td>0/2211</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>0.26</td>
<td>0/2203</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>0.28</td>
<td>0/2229</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>0.26</td>
<td>0/2229</td>
</tr>
<tr>
<td>1</td>
<td>O</td>
<td>0.27</td>
<td>0/2203</td>
</tr>
<tr>
<td>1</td>
<td>P</td>
<td>0.27</td>
<td>0/2203</td>
</tr>
<tr>
<td>1</td>
<td>Q</td>
<td>0.28</td>
<td>0/2229</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>0.26</td>
<td>0/2221</td>
</tr>
<tr>
<td>All</td>
<td>All</td>
<td>0.27</td>
<td>0/39802</td>
</tr>
</tbody>
</table>

There are no bond length outliers.
There are no bond angle outliers.
There are no chirality outliers.
There are no planarity outliers.

5.2  Too-close contacts

In the following table, the Non-H and H(model) columns list the number of non-hydrogen atoms and hydrogen atoms in the chain respectively. The H(added) column lists the number of hydrogen
atoms added and optimized by MolProbity. The Clashes column lists the number of clashes within
the asymmetric unit, whereas Symm-Clashes lists symmetry related clashes.

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Non-H</th>
<th>H(model)</th>
<th>H(added)</th>
<th>Clashes</th>
<th>Symm-Clashes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A</td>
<td>2184</td>
<td>0</td>
<td>2139</td>
<td>29</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>2164</td>
<td>0</td>
<td>2120</td>
<td>31</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>2157</td>
<td>0</td>
<td>2119</td>
<td>33</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>2169</td>
<td>0</td>
<td>2128</td>
<td>25</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>2149</td>
<td>0</td>
<td>2108</td>
<td>26</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>2158</td>
<td>0</td>
<td>2116</td>
<td>30</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>2158</td>
<td>0</td>
<td>2116</td>
<td>33</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>2149</td>
<td>0</td>
<td>2108</td>
<td>41</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>I</td>
<td>2169</td>
<td>0</td>
<td>2128</td>
<td>23</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>J</td>
<td>2167</td>
<td>0</td>
<td>2124</td>
<td>30</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>K</td>
<td>2166</td>
<td>0</td>
<td>2127</td>
<td>25</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>2158</td>
<td>0</td>
<td>2116</td>
<td>26</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>2184</td>
<td>0</td>
<td>2139</td>
<td>36</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>2184</td>
<td>0</td>
<td>2139</td>
<td>34</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>O</td>
<td>2158</td>
<td>0</td>
<td>2116</td>
<td>33</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>P</td>
<td>2158</td>
<td>0</td>
<td>2116</td>
<td>32</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>Q</td>
<td>2184</td>
<td>0</td>
<td>2139</td>
<td>36</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>2176</td>
<td>0</td>
<td>2131</td>
<td>80</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>A</td>
<td>26</td>
<td>0</td>
<td>19</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>52</td>
<td>0</td>
<td>38</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>C</td>
<td>26</td>
<td>0</td>
<td>19</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>D</td>
<td>26</td>
<td>0</td>
<td>19</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>E</td>
<td>26</td>
<td>0</td>
<td>19</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>F</td>
<td>26</td>
<td>0</td>
<td>19</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>G</td>
<td>26</td>
<td>0</td>
<td>19</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>H</td>
<td>26</td>
<td>0</td>
<td>19</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>I</td>
<td>26</td>
<td>0</td>
<td>19</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>J</td>
<td>26</td>
<td>0</td>
<td>19</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>K</td>
<td>26</td>
<td>0</td>
<td>19</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>L</td>
<td>26</td>
<td>0</td>
<td>19</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>M</td>
<td>26</td>
<td>0</td>
<td>19</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>N</td>
<td>26</td>
<td>0</td>
<td>19</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>O</td>
<td>26</td>
<td>0</td>
<td>19</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>P</td>
<td>26</td>
<td>0</td>
<td>19</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>Q</td>
<td>26</td>
<td>0</td>
<td>19</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>R</td>
<td>26</td>
<td>0</td>
<td>19</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>A</td>
<td>81</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>B</td>
<td>90</td>
<td>0</td>
<td>0</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>C</td>
<td>51</td>
<td>0</td>
<td>0</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>D</td>
<td>35</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>E</td>
<td>48</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

Continued on next page...
Continued from previous page...

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Non-H</th>
<th>H(model)</th>
<th>H(added)</th>
<th>Clashes</th>
<th>Symm-Clashes</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>F</td>
<td>72</td>
<td>0</td>
<td>0</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>G</td>
<td>22</td>
<td>0</td>
<td>0</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>H</td>
<td>19</td>
<td>0</td>
<td>0</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>I</td>
<td>46</td>
<td>0</td>
<td>0</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>J</td>
<td>21</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>K</td>
<td>11</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>L</td>
<td>21</td>
<td>0</td>
<td>0</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>M</td>
<td>28</td>
<td>0</td>
<td>0</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>N</td>
<td>19</td>
<td>0</td>
<td>0</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>O</td>
<td>38</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>P</td>
<td>25</td>
<td>0</td>
<td>0</td>
<td>13</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>Q</td>
<td>24</td>
<td>0</td>
<td>0</td>
<td>12</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>R</td>
<td>45</td>
<td>0</td>
<td>0</td>
<td>27</td>
<td>0</td>
</tr>
<tr>
<td>All</td>
<td>All</td>
<td>40182</td>
<td>0</td>
<td>38590</td>
<td>525</td>
<td>1</td>
</tr>
</tbody>
</table>

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The all-atom clashscore for this structure is 7.

All (525) close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:R:57:MET:SD</td>
<td>3:R:442:HOH:O</td>
<td>2.14</td>
<td>1.03</td>
</tr>
<tr>
<td>1:G:166:GLU:OE1</td>
<td>3:G:401:HOH:O</td>
<td>1.82</td>
<td>0.95</td>
</tr>
<tr>
<td>1:L:144:GLU:OE2</td>
<td>3:L:401:HOH:O</td>
<td>1.84</td>
<td>0.95</td>
</tr>
<tr>
<td>1:P:213:ASP:OD1</td>
<td>3:P:401:HOH:O</td>
<td>1.89</td>
<td>0.91</td>
</tr>
<tr>
<td>1:D:138:ARG:NH1</td>
<td>3:D:401:HOH:O</td>
<td>2.04</td>
<td>0.90</td>
</tr>
<tr>
<td>2:P:301:SAH:SD</td>
<td>3:P:425:HOH:O</td>
<td>2.30</td>
<td>0.89</td>
</tr>
<tr>
<td>1:R:238:VAL:O</td>
<td>3:R:401:HOH:O</td>
<td>1.90</td>
<td>0.88</td>
</tr>
<tr>
<td>1:P:151:ALA:O</td>
<td>3:P:402:HOH:O</td>
<td>1.91</td>
<td>0.88</td>
</tr>
<tr>
<td>1:O:63:ASP:OD2</td>
<td>3:O:401:HOH:O</td>
<td>1.89</td>
<td>0.87</td>
</tr>
<tr>
<td>1:M:24:PHE:N</td>
<td>3:M:401:HOH:O</td>
<td>2.06</td>
<td>0.86</td>
</tr>
<tr>
<td>1:R:148:CYS:SG</td>
<td>3:R:434:HOH:O</td>
<td>2.35</td>
<td>0.85</td>
</tr>
<tr>
<td>3:M:423:HOH:O</td>
<td>2:N:301:SAH:SD</td>
<td>2.35</td>
<td>0.84</td>
</tr>
<tr>
<td>1:R:19:ASP:OD1</td>
<td>3:R:402:HOH:O</td>
<td>1.95</td>
<td>0.84</td>
</tr>
<tr>
<td>3:Q:421:HOH:O</td>
<td>1:R:57:MET:SD</td>
<td>2.36</td>
<td>0.83</td>
</tr>
<tr>
<td>1:M:227:ASP:O</td>
<td>3:M:403:HOH:O</td>
<td>1.97</td>
<td>0.83</td>
</tr>
<tr>
<td>1:I:144:GLU:OE2</td>
<td>3:I:401:HOH:O</td>
<td>1.95</td>
<td>0.82</td>
</tr>
</tbody>
</table>

Continued on next page...
Continued from previous page...

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:R:74:ASP:OD1</td>
<td>3:R:403:HOH:O</td>
<td>1.96</td>
<td>0.82</td>
</tr>
<tr>
<td>1:M:57:MET:SD</td>
<td>3:N:414:HOH:O</td>
<td>2.38</td>
<td>0.82</td>
</tr>
<tr>
<td>1:M:197:GLU:O</td>
<td>3:M:404:HOH:O</td>
<td>1.97</td>
<td>0.81</td>
</tr>
<tr>
<td>1:A:28:TYR:OH</td>
<td>3:A:401:HOH:O</td>
<td>2.00</td>
<td>0.80</td>
</tr>
<tr>
<td>1:P:52:MET:O</td>
<td>3:P:403:HOH:O</td>
<td>2.00</td>
<td>0.79</td>
</tr>
<tr>
<td>1:O:216:SER:OG</td>
<td>3:O:402:HOH:O</td>
<td>2.00</td>
<td>0.78</td>
</tr>
<tr>
<td>1:F:184:VAL:HG13</td>
<td>1:F:205:PRO:HG2</td>
<td>1.66</td>
<td>0.78</td>
</tr>
<tr>
<td>1:R:48:VAL:O</td>
<td>3:R:404:HOH:O</td>
<td>2.02</td>
<td>0.78</td>
</tr>
<tr>
<td>1:K:170:VAL:N</td>
<td>3:K:401:HOH:O</td>
<td>2.16</td>
<td>0.77</td>
</tr>
<tr>
<td>1:M:184:VAL:HG13</td>
<td>1:M:205:PRO:HG2</td>
<td>1.67</td>
<td>0.77</td>
</tr>
<tr>
<td>1:K:184:VAL:HG13</td>
<td>1:K:205:PRO:HG2</td>
<td>1.67</td>
<td>0.77</td>
</tr>
<tr>
<td>1:G:184:VAL:HG13</td>
<td>1:G:205:PRO:HG2</td>
<td>1.68</td>
<td>0.76</td>
</tr>
<tr>
<td>1:O:184:VAL:HG13</td>
<td>1:O:205:PRO:HG2</td>
<td>1.68</td>
<td>0.75</td>
</tr>
<tr>
<td>1:N:64:ARG:O</td>
<td>3:N:401:HOH:O</td>
<td>2.05</td>
<td>0.75</td>
</tr>
<tr>
<td>1:L:184:VAL:HG13</td>
<td>1:L:205:PRO:HG2</td>
<td>1.68</td>
<td>0.75</td>
</tr>
<tr>
<td>1:F:63:ASP:OD2</td>
<td>3:F:403:HOH:O</td>
<td>2.05</td>
<td>0.74</td>
</tr>
<tr>
<td>1:I:184:VAL:HG13</td>
<td>1:I:205:PRO:HG2</td>
<td>1.68</td>
<td>0.73</td>
</tr>
<tr>
<td>1:J:40:LEU:O</td>
<td>3:J:401:HOH:O</td>
<td>2.05</td>
<td>0.73</td>
</tr>
<tr>
<td>1:E:251:THR:HG22</td>
<td>1:E:256:ALA:HA</td>
<td>1.68</td>
<td>0.73</td>
</tr>
<tr>
<td>1:I:62:GLN:OE1</td>
<td>3:R:405:HOH:O</td>
<td>2.05</td>
<td>0.73</td>
</tr>
<tr>
<td>1:I:253:ARG:NH1</td>
<td>3:I:404:HOH:O</td>
<td>2.20</td>
<td>0.73</td>
</tr>
<tr>
<td>1:C:125:LEU:O</td>
<td>1:C:127:GLU:N</td>
<td>2.20</td>
<td>0.72</td>
</tr>
<tr>
<td>1:D:249:GLU:N</td>
<td>3:D:402:HOH:O</td>
<td>2.15</td>
<td>0.72</td>
</tr>
<tr>
<td>1:H:86:CYS:SG</td>
<td>3:H:402:HOH:O</td>
<td>2.46</td>
<td>0.72</td>
</tr>
<tr>
<td>1:J:184:VAL:HG13</td>
<td>1:J:205:PRO:HG2</td>
<td>1.71</td>
<td>0.72</td>
</tr>
<tr>
<td>1:E:184:VAL:HG13</td>
<td>1:E:205:PRO:HG2</td>
<td>1.72</td>
<td>0.71</td>
</tr>
<tr>
<td>1:N:287:PRO:O</td>
<td>3:N:402:HOH:O</td>
<td>2.08</td>
<td>0.71</td>
</tr>
<tr>
<td>1:P:184:VAL:HG13</td>
<td>1:P:205:PRO:HG2</td>
<td>1.72</td>
<td>0.71</td>
</tr>
<tr>
<td>1:J:124:GLY:O</td>
<td>3:I:402:HOH:O</td>
<td>2.06</td>
<td>0.71</td>
</tr>
<tr>
<td>1:B:247:ARG:HG3</td>
<td>1:B:263:LEU:HD11</td>
<td>1.72</td>
<td>0.71</td>
</tr>
<tr>
<td>1:E:64:ARG:HG2</td>
<td>1:F:40:LEU:HD23</td>
<td>1.72</td>
<td>0.71</td>
</tr>
<tr>
<td>1:A:23:LYS:O</td>
<td>1:Q:138:ARG:NH1</td>
<td>2.24</td>
<td>0.71</td>
</tr>
<tr>
<td>1:Q:185:THR:OG1</td>
<td>3:Q:403:HOH:O</td>
<td>2.10</td>
<td>0.70</td>
</tr>
<tr>
<td>1:B:19:ASP:OD1</td>
<td>3:B:401:HOH:O</td>
<td>2.09</td>
<td>0.70</td>
</tr>
<tr>
<td>1:G:52:MET:HB2</td>
<td>1:H:274:ILE:HG23</td>
<td>1.73</td>
<td>0.70</td>
</tr>
<tr>
<td>1:Q:252:GLU:O</td>
<td>3:Q:402:HOH:O</td>
<td>2.09</td>
<td>0.69</td>
</tr>
<tr>
<td>1:P:227:ASP:OD1</td>
<td>3:P:405:HOH:O</td>
<td>2.10</td>
<td>0.69</td>
</tr>
</tbody>
</table>

Continued on next page...
Continued from previous page...

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:Q:274:ILE:HG23</td>
<td>1:R:52:MET:HB2</td>
<td>1.73</td>
<td>0.69</td>
</tr>
<tr>
<td>1:C:186:GLU:O</td>
<td>1:C:207:ARG:NH2</td>
<td>2.25</td>
<td>0.69</td>
</tr>
<tr>
<td>1:R:82:LEU:HA</td>
<td>3:R:410:HOH:O</td>
<td>1.91</td>
<td>0.69</td>
</tr>
<tr>
<td>1:H:184:VAL:HG13</td>
<td>1:H:205:PRO:HG2</td>
<td>1.73</td>
<td>0.69</td>
</tr>
<tr>
<td>1:L:63:ASP:OD1</td>
<td>3:L:403:HOH:O</td>
<td>2.11</td>
<td>0.68</td>
</tr>
<tr>
<td>1:R:49:PRO:O</td>
<td>3:R:407:HOH:O</td>
<td>2.11</td>
<td>0.68</td>
</tr>
<tr>
<td>1:G:275:ARG:N</td>
<td>3:G:404:HOH:O</td>
<td>2.25</td>
<td>0.68</td>
</tr>
<tr>
<td>1:M:10:GLN:OE1</td>
<td>3:M:405:HOH:O</td>
<td>2.10</td>
<td>0.68</td>
</tr>
<tr>
<td>1:G:247:ARG:HG3</td>
<td>1:G:263:LEU:HD11</td>
<td>1.74</td>
<td>0.68</td>
</tr>
<tr>
<td>1:E:247:ARG:HG3</td>
<td>1:E:263:LEU:HD11</td>
<td>1.74</td>
<td>0.68</td>
</tr>
<tr>
<td>1:C:247:ARG:HG3</td>
<td>1:C:263:LEU:HD11</td>
<td>1.76</td>
<td>0.68</td>
</tr>
<tr>
<td>1:N:288:ALA:N</td>
<td>3:N:404:HOH:O</td>
<td>2.20</td>
<td>0.68</td>
</tr>
<tr>
<td>1:M:274:ILE:HG23</td>
<td>1:N:52:B:MET:HB2</td>
<td>1.77</td>
<td>0.67</td>
</tr>
<tr>
<td>1:C:220:PHE:O</td>
<td>3:C:402:HOH:O</td>
<td>2.12</td>
<td>0.67</td>
</tr>
<tr>
<td>1:R:97:ARG:O</td>
<td>3:R:408:HOH:O</td>
<td>2.11</td>
<td>0.67</td>
</tr>
<tr>
<td>1:R:211:PHE:O</td>
<td>3:R:409:HOH:O</td>
<td>2.13</td>
<td>0.67</td>
</tr>
<tr>
<td>1:B:75:PRO:HG2</td>
<td>1:B:99:ARG:HG3</td>
<td>1.77</td>
<td>0.67</td>
</tr>
<tr>
<td>1:G:80:HIS:HE2</td>
<td>1:G:104:THR:HG1</td>
<td>1.41</td>
<td>0.67</td>
</tr>
<tr>
<td>1:A:30:LEU:O</td>
<td>1:B:246:ARG:NH2</td>
<td>2.27</td>
<td>0.67</td>
</tr>
<tr>
<td>1:K:36:VAL:HB</td>
<td>2:L:301:SAH:HB2</td>
<td>1.77</td>
<td>0.67</td>
</tr>
<tr>
<td>1:D:184:VAL:HG13</td>
<td>1:D:205:PRO:HG2</td>
<td>1.77</td>
<td>0.66</td>
</tr>
<tr>
<td>1:M:90:ARG:NH1</td>
<td>3:M:402:HOH:O</td>
<td>1.96</td>
<td>0.66</td>
</tr>
<tr>
<td>1:B:10:GLN:OE1</td>
<td>3:B:402:HOH:O</td>
<td>2.14</td>
<td>0.66</td>
</tr>
<tr>
<td>1:N:285:ARG:NH2</td>
<td>3:R:404:HOH:O</td>
<td>2.27</td>
<td>0.66</td>
</tr>
<tr>
<td>1:K:247:ARG:HG3</td>
<td>1:K:263:LEU:HD11</td>
<td>1.76</td>
<td>0.66</td>
</tr>
<tr>
<td>1:O:30:LEU:O</td>
<td>1:P:246:ARG:NH2</td>
<td>2.28</td>
<td>0.66</td>
</tr>
<tr>
<td>1:M:52:B:MET:HB2</td>
<td>1:N:274:ILE:HG23</td>
<td>1.77</td>
<td>0.65</td>
</tr>
<tr>
<td>1:Q:30:LEU:O</td>
<td>1:R:246:ARG:NH2</td>
<td>2.30</td>
<td>0.65</td>
</tr>
<tr>
<td>1:B:184:VAL:HG11</td>
<td>1:B:188:LEU:HD11</td>
<td>1.79</td>
<td>0.65</td>
</tr>
<tr>
<td>1:D:199:LEU:HD22</td>
<td>1:D:262:LEU:HD23</td>
<td>1.79</td>
<td>0.65</td>
</tr>
<tr>
<td>1:N:184:VAL:HG13</td>
<td>1:N:205:PRO:HG2</td>
<td>1.78</td>
<td>0.65</td>
</tr>
<tr>
<td>1:C:184:VAL:HG13</td>
<td>1:C:205:PRO:HG2</td>
<td>1.78</td>
<td>0.64</td>
</tr>
<tr>
<td>1:Q:184:VAL:HG13</td>
<td>1:Q:205:PRO:HG2</td>
<td>1.78</td>
<td>0.64</td>
</tr>
</tbody>
</table>

Continued on next page...
<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:J:113:ILE:HD12</td>
<td>1:J:131:PHE:HB3</td>
<td>1.78</td>
<td>0.64</td>
</tr>
<tr>
<td>1:H:87:GLY:O</td>
<td>3:H:402:HOH:O</td>
<td>2.15</td>
<td>0.64</td>
</tr>
<tr>
<td>1:I:42:PHE:HZ</td>
<td>1:I:57:MET:HB3</td>
<td>1.62</td>
<td>0.64</td>
</tr>
<tr>
<td>1:C:274:ILE:HG23</td>
<td>1:D:52:MET:HB2</td>
<td>1.80</td>
<td>0.63</td>
</tr>
<tr>
<td>1:G:30:LEU:O</td>
<td>1:H:246:ARG:NH2</td>
<td>2.31</td>
<td>0.63</td>
</tr>
<tr>
<td>1:G:42:PHE:HZ</td>
<td>1:G:57:MET:HB3</td>
<td>1.62</td>
<td>0.63</td>
</tr>
<tr>
<td>1:N:152:ILE:HG23</td>
<td>1:N:180:LEU:HD22</td>
<td>1.79</td>
<td>0.63</td>
</tr>
<tr>
<td>1:C:227:ASP:OD1</td>
<td>3:C:403:HOH:O</td>
<td>2.16</td>
<td>0.62</td>
</tr>
<tr>
<td>1:N:85:GLY:O</td>
<td>2:N:301:SAH:N</td>
<td>2.33</td>
<td>0.62</td>
</tr>
<tr>
<td>1:H:115:ALA:HA</td>
<td>1:H:118:ARG:HH11</td>
<td>1.65</td>
<td>0.62</td>
</tr>
<tr>
<td>1:B:48:VAL:O</td>
<td>1:D:285:ARG:NH2</td>
<td>2.33</td>
<td>0.62</td>
</tr>
<tr>
<td>1:K:246:ARG:NH2</td>
<td>1:L:30:LEU:O</td>
<td>2.32</td>
<td>0.62</td>
</tr>
<tr>
<td>1:B:101:ILE:O</td>
<td>1:B:128:ARG:NH1</td>
<td>2.33</td>
<td>0.62</td>
</tr>
<tr>
<td>1:O:26:GLU:OE1</td>
<td>1:P:253:ARG:NH2</td>
<td>2.33</td>
<td>0.61</td>
</tr>
<tr>
<td>1:B:184:VAL:HG13</td>
<td>1:B:205:PRO:HG2</td>
<td>1.82</td>
<td>0.61</td>
</tr>
<tr>
<td>1:K:52:MET:HB2</td>
<td>1:L:274:ILE:HG23</td>
<td>1.82</td>
<td>0.61</td>
</tr>
<tr>
<td>1:A:247:ARG:HG3</td>
<td>1:A:263:LEU:HD11</td>
<td>1.81</td>
<td>0.61</td>
</tr>
<tr>
<td>1:C:200:TYR:O</td>
<td>1:C:202:ALA:N</td>
<td>2.33</td>
<td>0.61</td>
</tr>
<tr>
<td>1:H:42:PHE:HZ</td>
<td>1:H:57:MET:HB3</td>
<td>1.66</td>
<td>0.61</td>
</tr>
<tr>
<td>1:Q:249:GLU:N</td>
<td>3:Q:410:HOH:O</td>
<td>2.33</td>
<td>0.61</td>
</tr>
<tr>
<td>1:A:253:ARG:NH1</td>
<td>1:B:26:GLU:OE1</td>
<td>2.33</td>
<td>0.61</td>
</tr>
<tr>
<td>1:E:42:PHE:HZ</td>
<td>1:E:57:MET:HB3</td>
<td>1.65</td>
<td>0.61</td>
</tr>
<tr>
<td>2:B:301:SAH:N</td>
<td>3:B:406:HOH:O</td>
<td>2.21</td>
<td>0.61</td>
</tr>
<tr>
<td>1:H:186:GLU:O</td>
<td>1:H:207:ARG:NH2</td>
<td>2.34</td>
<td>0.60</td>
</tr>
<tr>
<td>1:P:247:ARG:NH2</td>
<td>3:P:404:HOH:O</td>
<td>2.08</td>
<td>0.60</td>
</tr>
<tr>
<td>1:J:75:PRO:HG2</td>
<td>1:J:99:ARG:HG3</td>
<td>1.82</td>
<td>0.60</td>
</tr>
<tr>
<td>1:O:52:MET:HB2</td>
<td>1:P:274:ILE:HG23</td>
<td>1.84</td>
<td>0.59</td>
</tr>
<tr>
<td>1:H:199:LEU:HD22</td>
<td>1:H:262:LEU:HD23</td>
<td>1.84</td>
<td>0.59</td>
</tr>
<tr>
<td>1:L:126:THR:N</td>
<td>3:L:410:HOH:O</td>
<td>2.35</td>
<td>0.59</td>
</tr>
<tr>
<td>1:Q:42:PHE:HZ</td>
<td>1:Q:57:MET:HB3</td>
<td>1.67</td>
<td>0.59</td>
</tr>
<tr>
<td>1:R:131:PHE:N</td>
<td>3:R:406:HOH:O</td>
<td>2.08</td>
<td>0.59</td>
</tr>
<tr>
<td>1:O:42:PHE:HZ</td>
<td>1:O:57:MET:HB3</td>
<td>1.68</td>
<td>0.59</td>
</tr>
<tr>
<td>1:G:49:PRO:O</td>
<td>3:G:403:HOH:O</td>
<td>2.17</td>
<td>0.59</td>
</tr>
<tr>
<td>1:I:223:LEU:HD11</td>
<td>1:I:285:ARG:HG3</td>
<td>1.84</td>
<td>0.59</td>
</tr>
<tr>
<td>1:F:247:ARG:HG3</td>
<td>1:F:263:LEU:HD11</td>
<td>1.84</td>
<td>0.59</td>
</tr>
<tr>
<td>1:H:233:ALA:O</td>
<td>1:H:237:ASN:ND2</td>
<td>2.35</td>
<td>0.59</td>
</tr>
<tr>
<td>1:R:101:ILE:O</td>
<td>1:R:128:ARG:NH1</td>
<td>2.37</td>
<td>0.58</td>
</tr>
</tbody>
</table>

Continued from previous page...
Continued from previous page...

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:R:81:LEU:O</td>
<td>3:R:410:HOH:O</td>
<td>2.17</td>
<td>0.58</td>
</tr>
<tr>
<td>1:Q:52[B]:MET:HB2</td>
<td>1:R:274:ILE:HG23</td>
<td>1.83</td>
<td>0.58</td>
</tr>
<tr>
<td>1:C:64:ARG:HG2</td>
<td>1:D:40:LEU:HD23</td>
<td>1.86</td>
<td>0.58</td>
</tr>
<tr>
<td>1:I:101:ILE:O</td>
<td>1:I:128:ARG:NH1</td>
<td>2.36</td>
<td>0.58</td>
</tr>
<tr>
<td>1:D:152:ILE:HG23</td>
<td>1:D:180:LEU:HD22</td>
<td>1.84</td>
<td>0.57</td>
</tr>
<tr>
<td>1:P:42:PHE:HZ</td>
<td>1:P:57:MET:HB3</td>
<td>1.69</td>
<td>0.57</td>
</tr>
<tr>
<td>1:A:184:VAL:HG13</td>
<td>1:A:205:PRO:HG2</td>
<td>1.86</td>
<td>0.57</td>
</tr>
<tr>
<td>1:B:174:GLY:O</td>
<td>1:B:285:ARG:NH1</td>
<td>2.38</td>
<td>0.57</td>
</tr>
<tr>
<td>1:C:36:VAL:HB</td>
<td>2:D:301:SAH:HB2</td>
<td>1.86</td>
<td>0.57</td>
</tr>
<tr>
<td>1:Q:118:ARG:NH1</td>
<td>3:Q:401:HOH:O</td>
<td>2.03</td>
<td>0.57</td>
</tr>
<tr>
<td>1:P:97:ARG:HG2</td>
<td>3:P:411:HOH:O</td>
<td>2.34</td>
<td>0.57</td>
</tr>
<tr>
<td>1:R:232:LEU:HD22</td>
<td>1:R:279:PHE:CD1</td>
<td>2.40</td>
<td>0.57</td>
</tr>
<tr>
<td>1:B:260:ASP:OD1</td>
<td>3:B:403:HOH:O</td>
<td>2.18</td>
<td>0.57</td>
</tr>
<tr>
<td>1:G:274:ILE:HG23</td>
<td>1:H:52:MET:HB2</td>
<td>1.87</td>
<td>0.57</td>
</tr>
<tr>
<td>1:Q:52[A]:MET:HB2</td>
<td>1:R:274:ILE:HG23</td>
<td>1.85</td>
<td>0.57</td>
</tr>
<tr>
<td>1:R:166:GLU:OE2</td>
<td>1:R:169:ARG:NH2</td>
<td>2.31</td>
<td>0.57</td>
</tr>
<tr>
<td>1:Q:40:LEU:HD23</td>
<td>1:R:64:ARG:HG2</td>
<td>1.87</td>
<td>0.57</td>
</tr>
<tr>
<td>1:F:251:THR:HG22</td>
<td>1:F:256:ALA:HA</td>
<td>1.87</td>
<td>0.56</td>
</tr>
<tr>
<td>1:K:30:LEU:O</td>
<td>1:L:246:ARG:NH2</td>
<td>2.37</td>
<td>0.56</td>
</tr>
<tr>
<td>1:D:85:GLY:O</td>
<td>2:D:301:SAH:N</td>
<td>2.39</td>
<td>0.56</td>
</tr>
<tr>
<td>1:R:152:ILE:HG23</td>
<td>1:R:180:LEU:HD22</td>
<td>1.87</td>
<td>0.56</td>
</tr>
<tr>
<td>1:D:42:PHE:HZ</td>
<td>1:D:57:MET:HB3</td>
<td>1.70</td>
<td>0.56</td>
</tr>
<tr>
<td>1:L:80:HIS:HE2</td>
<td>1:L:104:THR:HG1</td>
<td>1.45</td>
<td>0.56</td>
</tr>
<tr>
<td>1:R:188:LEU:O</td>
<td>1:R:192:GLU:HB2</td>
<td>2.05</td>
<td>0.56</td>
</tr>
<tr>
<td>2:O:301:SAH:OH</td>
<td>1:P:17:VAL:HG11</td>
<td>1.86</td>
<td>0.56</td>
</tr>
<tr>
<td>1:M:253:ARG:NH1</td>
<td>1:N:26:GLU:OE1</td>
<td>2.39</td>
<td>0.56</td>
</tr>
<tr>
<td>1:P:286:LYS:O</td>
<td>3:P:407:HOH:O</td>
<td>2.18</td>
<td>0.56</td>
</tr>
<tr>
<td>1:R:66:THR:OG1</td>
<td>3:R:411:HOH:O</td>
<td>2.18</td>
<td>0.56</td>
</tr>
<tr>
<td>2:K:301:SAH:HB2</td>
<td>1:L:36:VAL:HB</td>
<td>1.88</td>
<td>0.56</td>
</tr>
<tr>
<td>1:E:74:ASP:OD1</td>
<td>1:E:99:ARG:NH1</td>
<td>2.36</td>
<td>0.56</td>
</tr>
<tr>
<td>1:I:247:ARG:HG3</td>
<td>1:I:263:LEU:HD11</td>
<td>1.87</td>
<td>0.56</td>
</tr>
<tr>
<td>1:R:104:THR:HB</td>
<td>3:R:410:HOH:O</td>
<td>2.05</td>
<td>0.56</td>
</tr>
<tr>
<td>1:R:250:PHE:HE1</td>
<td>3:R:422:HOH:O</td>
<td>1.88</td>
<td>0.56</td>
</tr>
<tr>
<td>1:E:30:LEU:O</td>
<td>1:F:246:ARG:NH2</td>
<td>2.39</td>
<td>0.56</td>
</tr>
<tr>
<td>2:L:301:SAH:N</td>
<td>3:L:404:HOH:O</td>
<td>2.15</td>
<td>0.56</td>
</tr>
</tbody>
</table>

Continued on next page...
<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:K:40:LEU:HD23</td>
<td>1:L:64:ARG:HG2</td>
<td>1.89</td>
<td>0.55</td>
</tr>
<tr>
<td>1:J:144:GLU:HG2</td>
<td>1:J:172:LYS:HA</td>
<td>1.88</td>
<td>0.55</td>
</tr>
<tr>
<td>1:L:152:ILE:HG23</td>
<td>1:L:180:LEU:HD22</td>
<td>1.88</td>
<td>0.55</td>
</tr>
<tr>
<td>1:E:75:PRO:HG2</td>
<td>1:E:99:ARG:HG3</td>
<td>1.88</td>
<td>0.55</td>
</tr>
<tr>
<td>1:A:52[B]:MET:HB2</td>
<td>1:B:274:ILE:HG23</td>
<td>1.89</td>
<td>0.55</td>
</tr>
<tr>
<td>1:G:66:THR:HG23</td>
<td>1:G:91:THR:HG23</td>
<td>1.87</td>
<td>0.55</td>
</tr>
<tr>
<td>1:B:10:GLN:N</td>
<td>3:B:414:HOH:O</td>
<td>2.38</td>
<td>0.55</td>
</tr>
<tr>
<td>1:H:258:PHE:HA</td>
<td>3:H:411:HOH:O</td>
<td>2.07</td>
<td>0.54</td>
</tr>
<tr>
<td>1:K:152:ILE:HG23</td>
<td>1:K:180:LEU:HD22</td>
<td>1.88</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:42:PHE:HZ</td>
<td>1:A:57:MET:HB3</td>
<td>1.73</td>
<td>0.54</td>
</tr>
<tr>
<td>1:H:249:GLU:N</td>
<td>3:H:401:HOH:O</td>
<td>1.97</td>
<td>0.54</td>
</tr>
<tr>
<td>1:R:109:SER:HB3</td>
<td>1:R:112:GLN:HB2</td>
<td>1.88</td>
<td>0.54</td>
</tr>
<tr>
<td>1:R:91:THR:HG21</td>
<td>1:R:152:ILE:HD12</td>
<td>1.89</td>
<td>0.54</td>
</tr>
<tr>
<td>1:O:183:VAL:HG11</td>
<td>1:O:208:LEU:HD23</td>
<td>1.88</td>
<td>0.54</td>
</tr>
<tr>
<td>1:C:199:LEU:HD22</td>
<td>1:C:262:LEU:HD23</td>
<td>1.90</td>
<td>0.54</td>
</tr>
<tr>
<td>1:F:42:PHE:HZ</td>
<td>1:F:57:MET:HB3</td>
<td>1.73</td>
<td>0.54</td>
</tr>
<tr>
<td>1:G:253:ARG:NH1</td>
<td>1:H:26:GLU:OE1</td>
<td>2.35</td>
<td>0.54</td>
</tr>
<tr>
<td>1:M:26:GLU:OE1</td>
<td>1:N:253:ARG:NH1</td>
<td>2.41</td>
<td>0.54</td>
</tr>
<tr>
<td>1:Q:239:PHE:HB2</td>
<td>1:R:32:LEU:HD21</td>
<td>1.89</td>
<td>0.54</td>
</tr>
<tr>
<td>1:Q:32:LEU:HG</td>
<td>3:Q:404:HOH:O</td>
<td>2.07</td>
<td>0.54</td>
</tr>
<tr>
<td>1:A:152:ILE:HG23</td>
<td>1:A:180:LEU:HD22</td>
<td>1.90</td>
<td>0.54</td>
</tr>
<tr>
<td>1:F:49:PRO:O</td>
<td>3:F:404:HOH:O</td>
<td>2.18</td>
<td>0.53</td>
</tr>
<tr>
<td>1:M:271:GLU:OE2</td>
<td>1:M:275:ARG:NE</td>
<td>2.41</td>
<td>0.53</td>
</tr>
<tr>
<td>1:D:101:ILE:O</td>
<td>1:D:128:ARG:NH1</td>
<td>2.41</td>
<td>0.53</td>
</tr>
<tr>
<td>1:H:143:ASP:OD1</td>
<td>1:H:169:ARG:NH1</td>
<td>2.38</td>
<td>0.53</td>
</tr>
<tr>
<td>1:N:42:PHE:HZ</td>
<td>1:N:57:MET:HB3</td>
<td>1.74</td>
<td>0.53</td>
</tr>
<tr>
<td>1:C:115:ALA:O</td>
<td>1:C:118:ARG:HG2</td>
<td>2.08</td>
<td>0.53</td>
</tr>
<tr>
<td>1:H:120:ALA:HB2</td>
<td>1:H:131:PHE:HE2</td>
<td>1.74</td>
<td>0.53</td>
</tr>
<tr>
<td>1:H:77:ALA:HA</td>
<td>3:H:403:HOH:O</td>
<td>2.09</td>
<td>0.53</td>
</tr>
<tr>
<td>1:J:42:PHE:HZ</td>
<td>1:J:57:MET:HB3</td>
<td>1.74</td>
<td>0.53</td>
</tr>
<tr>
<td>1:L:42:PHE:HZ</td>
<td>1:L:57:MET:HB3</td>
<td>1.74</td>
<td>0.53</td>
</tr>
<tr>
<td>1:O:274:ILE:HG23</td>
<td>1:P:52:MET:HB2</td>
<td>1.91</td>
<td>0.52</td>
</tr>
<tr>
<td>1:R:88:THR:O</td>
<td>3:R:412:HOH:O</td>
<td>2.19</td>
<td>0.52</td>
</tr>
<tr>
<td>1:C:285:ARG:NH2</td>
<td>3:C:411:HOH:O</td>
<td>2.41</td>
<td>0.52</td>
</tr>
<tr>
<td>3:Q:404:HOH:O</td>
<td>1:R:239:PHE:HD1</td>
<td>1.92</td>
<td>0.52</td>
</tr>
</tbody>
</table>

Continued on next page...
Continued from previous page...

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:E:52:MET:HB2</td>
<td>1:F:274:ILE:HG23</td>
<td>1.92</td>
<td>0.52</td>
</tr>
<tr>
<td>1:O:271:GLU:O2</td>
<td>1:O:275:ARG:NE</td>
<td>2.43</td>
<td>0.52</td>
</tr>
<tr>
<td>1:G:158:MET:O</td>
<td>1:G:203:ASN:ND2</td>
<td>2.42</td>
<td>0.52</td>
</tr>
<tr>
<td>1:K:271:GLU:O2</td>
<td>1:K:275:ARG:NE</td>
<td>2.42</td>
<td>0.52</td>
</tr>
<tr>
<td>1:R:184:VAL:HG13</td>
<td>1:R:205:PRO:HG2</td>
<td>1.92</td>
<td>0.52</td>
</tr>
<tr>
<td>1:A:246:ARG:NE2</td>
<td>1:B:30:LEU:O</td>
<td>2.41</td>
<td>0.52</td>
</tr>
<tr>
<td>1:I:247:ARG:NE2</td>
<td>3:I:407:HOH:O</td>
<td>2.42</td>
<td>0.52</td>
</tr>
<tr>
<td>1:R:74:ASP:CG</td>
<td>3:R:403:HOH:O</td>
<td>2.42</td>
<td>0.52</td>
</tr>
<tr>
<td>1:C:93:LEU:HD22</td>
<td>1:C:119:LEU:O</td>
<td>1.91</td>
<td>0.52</td>
</tr>
<tr>
<td>1:J:101:ILE:O</td>
<td>1:J:128:ARG:NH1</td>
<td>2.43</td>
<td>0.52</td>
</tr>
<tr>
<td>1:J:160:ARG:O</td>
<td>3:J:405:HOH:O</td>
<td>2.42</td>
<td>0.52</td>
</tr>
<tr>
<td>1:I:52:MET:HB2</td>
<td>1:J:274:ILE:HG23</td>
<td>1.91</td>
<td>0.51</td>
</tr>
<tr>
<td>1:G:246:ARG:HH21</td>
<td>1:G:250:PHE:HZ</td>
<td>1.57</td>
<td>0.51</td>
</tr>
<tr>
<td>1:R:42:PHE:HZ</td>
<td>1:R:57:MET:HB3</td>
<td>1.74</td>
<td>0.51</td>
</tr>
<tr>
<td>1:R:187:GLU:O</td>
<td>1:R:188:LEU:HB2</td>
<td>2.11</td>
<td>0.51</td>
</tr>
<tr>
<td>1:M:52:MET:HB2</td>
<td>1:N:274:ILE:HG23</td>
<td>1.93</td>
<td>0.51</td>
</tr>
<tr>
<td>1:N:83:ASP:HB3</td>
<td>1:N:86:CYS:HB3</td>
<td>1.92</td>
<td>0.51</td>
</tr>
<tr>
<td>1:J:65:TYR:O</td>
<td>1:J:69:LEU:HG</td>
<td>2.11</td>
<td>0.51</td>
</tr>
<tr>
<td>1:F:143:ASP:O2</td>
<td>1:F:169:ARG:NH1</td>
<td>2.38</td>
<td>0.51</td>
</tr>
<tr>
<td>1:J:166:GLU:OE2</td>
<td>1:J:169:ARG:NH2</td>
<td>2.33</td>
<td>0.51</td>
</tr>
<tr>
<td>1:F:138:ARG:NH1</td>
<td>3:I:404:HOH:O</td>
<td>2.44</td>
<td>0.51</td>
</tr>
<tr>
<td>1:A:274:ILE:HG23</td>
<td>1:B:52:MET:HB2</td>
<td>1.91</td>
<td>0.50</td>
</tr>
<tr>
<td>1:G:276:LYS:N</td>
<td>3:G:404:HOH:O</td>
<td>2.34</td>
<td>0.50</td>
</tr>
<tr>
<td>1:R:246:ARG:NH1</td>
<td>3:R:423:HOH:O</td>
<td>2.43</td>
<td>0.50</td>
</tr>
<tr>
<td>1:Q:139:LEU:H</td>
<td>1:Q:166:GLU:HG2</td>
<td>1.76</td>
<td>0.50</td>
</tr>
<tr>
<td>1:G:40:LEU:HD23</td>
<td>1:H:64:ARG:HG2</td>
<td>1.93</td>
<td>0.50</td>
</tr>
<tr>
<td>1:C:101:ILE:O</td>
<td>1:C:128:ARG:NH1</td>
<td>2.44</td>
<td>0.50</td>
</tr>
<tr>
<td>1:E:152:ILE:HG23</td>
<td>1:E:180:LEU:HD22</td>
<td>1.94</td>
<td>0.50</td>
</tr>
<tr>
<td>1:H:74:ASP:O2</td>
<td>1:H:99:ARG:NH1</td>
<td>2.38</td>
<td>0.50</td>
</tr>
<tr>
<td>1:R:229:SER:HA</td>
<td>1:R:279:PHE:HB3</td>
<td>1.93</td>
<td>0.50</td>
</tr>
<tr>
<td>1:D:113:ILE:O</td>
<td>1:D:117:ASN:ND2</td>
<td>2.44</td>
<td>0.50</td>
</tr>
<tr>
<td>1:I:274:ILE:HG23</td>
<td>1:J:52:MET:HB2</td>
<td>1.93</td>
<td>0.50</td>
</tr>
<tr>
<td>1:R:19:ASP:HA</td>
<td>3:R:402:HOH:O</td>
<td>2.10</td>
<td>0.50</td>
</tr>
<tr>
<td>1:D:188:LEU:N</td>
<td>3:D:408:HOH:O</td>
<td>2.36</td>
<td>0.50</td>
</tr>
<tr>
<td>1:M:29:HIS:HA</td>
<td>1:M:33:GLY:O</td>
<td>2.11</td>
<td>0.50</td>
</tr>
<tr>
<td>1:O:152:ILE:HG23</td>
<td>1:O:180:LEU:HD22</td>
<td>1.94</td>
<td>0.50</td>
</tr>
</tbody>
</table>

Continued on next page...
<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:K:199:LEU:HD22</td>
<td>1:K:262:LEU:HD23</td>
<td>1.94</td>
<td>0.49</td>
</tr>
<tr>
<td>1:L:85:GLY:O</td>
<td>2:L:301:SAH:N</td>
<td>2.44</td>
<td>0.49</td>
</tr>
<tr>
<td>1:E:83:ASP:OD2</td>
<td>3:E:401:HOH:O</td>
<td>2.18</td>
<td>0.49</td>
</tr>
<tr>
<td>1:G:152:ILE:HG23</td>
<td>1:G:180:LEU:HD22</td>
<td>1.94</td>
<td>0.49</td>
</tr>
<tr>
<td>1:H:87:GLY:N</td>
<td>3:H:402:HOH:O</td>
<td>2.45</td>
<td>0.49</td>
</tr>
<tr>
<td>1:I:246:ARG:NH2</td>
<td>1:J:30:LEU:O</td>
<td>2.46</td>
<td>0.49</td>
</tr>
<tr>
<td>1:M:274:ILE:HG23</td>
<td>1:N:52[A]:MET:HB2</td>
<td>1.94</td>
<td>0.49</td>
</tr>
<tr>
<td>1:R:73:LEU:HB2</td>
<td>1:R:178:LEU:HD22</td>
<td>1.95</td>
<td>0.49</td>
</tr>
<tr>
<td>1:F:139:LEU:H</td>
<td>1:F:166:GLU:HG2</td>
<td>1.77</td>
<td>0.49</td>
</tr>
<tr>
<td>2:M:301:SAH:HB2</td>
<td>1:N:36:VAL:HB</td>
<td>1.95</td>
<td>0.49</td>
</tr>
<tr>
<td>1:R:194:ALA:O</td>
<td>1:R:198:THR:OG1</td>
<td>2.28</td>
<td>0.49</td>
</tr>
<tr>
<td>1:R:242:GLY:HA2</td>
<td>3:R:441:HOH:O</td>
<td>2.12</td>
<td>0.49</td>
</tr>
<tr>
<td>1:K:223:LEU:HD11</td>
<td>1:K:285:ARG:NE</td>
<td>2.27</td>
<td>0.49</td>
</tr>
<tr>
<td>1:O:164:LEU:HD12</td>
<td>1:O:214:ILE:HG22</td>
<td>1.95</td>
<td>0.49</td>
</tr>
<tr>
<td>1:R:170:VAL:HG23</td>
<td>3:R:416:HOH:O</td>
<td>2.11</td>
<td>0.49</td>
</tr>
<tr>
<td>1:H:251:THR:HG22</td>
<td>1:H:256:ALA:HA</td>
<td>1.94</td>
<td>0.49</td>
</tr>
<tr>
<td>1:B:49:PRO:O</td>
<td>1:D:285[B]:ARG:NH1</td>
<td>2.40</td>
<td>0.48</td>
</tr>
<tr>
<td>1:E:42:PHE:CZ</td>
<td>1:E:57:MET:HB3</td>
<td>2.47</td>
<td>0.48</td>
</tr>
<tr>
<td>1:K:67:ASP:OD2</td>
<td>3:K:403:HOH:O</td>
<td>2.20</td>
<td>0.48</td>
</tr>
<tr>
<td>1:L:223:LEU:HD11</td>
<td>1:L:285:ARG:NE</td>
<td>2.27</td>
<td>0.48</td>
</tr>
<tr>
<td>1:P:164:LEU:HD12</td>
<td>1:P:214:ILE:HG22</td>
<td>1.94</td>
<td>0.48</td>
</tr>
<tr>
<td>1:B:151:ALA:O</td>
<td>3:B:404:HOH:O</td>
<td>2.19</td>
<td>0.48</td>
</tr>
<tr>
<td>1:E:101:ILE:O</td>
<td>1:E:128:ARG:NH1</td>
<td>2.46</td>
<td>0.48</td>
</tr>
<tr>
<td>1:L:110:LYS:HD3</td>
<td>3:L:413:HOH:O</td>
<td>2.13</td>
<td>0.48</td>
</tr>
<tr>
<td>1:O:104:THR:HA</td>
<td>1:O:130:THR:O</td>
<td>2.13</td>
<td>0.48</td>
</tr>
<tr>
<td>2:C:301:SAH:HB2</td>
<td>1:D:36:VAL:HB</td>
<td>1.95</td>
<td>0.48</td>
</tr>
<tr>
<td>1:M:75:PRO:HG2</td>
<td>1:M:99:ARG:HG3</td>
<td>1.96</td>
<td>0.48</td>
</tr>
<tr>
<td>1:E:36:VAL:HB</td>
<td>2:F:301:SAH:HB2</td>
<td>1.94</td>
<td>0.48</td>
</tr>
<tr>
<td>1:M:66:THR:HG23</td>
<td>1:M:91:THR:HG23</td>
<td>1.96</td>
<td>0.48</td>
</tr>
<tr>
<td>1:O:253:ARG:HH11</td>
<td>1:P:30:LEU:HD11</td>
<td>1.79</td>
<td>0.48</td>
</tr>
<tr>
<td>1:P:85:GLY:O</td>
<td>2:P:301:SAH:N</td>
<td>2.47</td>
<td>0.48</td>
</tr>
<tr>
<td>2:E:301:SAH:HB2</td>
<td>1:F:36:VAL:HB</td>
<td>1.95</td>
<td>0.48</td>
</tr>
<tr>
<td>1:R:183:VAL:HG11</td>
<td>1:R:208:LEU:HD23</td>
<td>1.96</td>
<td>0.48</td>
</tr>
<tr>
<td>1:R:85:GLY:O</td>
<td>2:R:301:SAH:N</td>
<td>2.47</td>
<td>0.48</td>
</tr>
<tr>
<td>1:R:88:THR:HB</td>
<td>3:R:412:HOH:O</td>
<td>2.13</td>
<td>0.48</td>
</tr>
<tr>
<td>1:M:246:ARG:NH2</td>
<td>1:N:30:LEU:O</td>
<td>2.47</td>
<td>0.47</td>
</tr>
<tr>
<td>1:R:98:GLN:HA</td>
<td>3:R:440:HOH:O</td>
<td>2.13</td>
<td>0.47</td>
</tr>
</tbody>
</table>

Continued from previous page...

Continued on next page...
### Continued from previous page...

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:A:40:LEU:HD23</td>
<td>1:J:64:ARG:HG2</td>
<td>1.97</td>
<td>0.47</td>
</tr>
<tr>
<td>1:J:14:GLU:HG2</td>
<td>1:J:173:PRO:HD3</td>
<td>1.97</td>
<td>0.47</td>
</tr>
<tr>
<td>1:J:74:ASP:OD1</td>
<td>1:J:99:ARG:NH1</td>
<td>2.43</td>
<td>0.47</td>
</tr>
<tr>
<td>1:C:18:ARG:NH1</td>
<td>3:C:414:HOH:O</td>
<td>2.47</td>
<td>0.47</td>
</tr>
<tr>
<td>1:C:40:LEU:HD23</td>
<td>1:D:64:ARG:HG2</td>
<td>1.97</td>
<td>0.47</td>
</tr>
<tr>
<td>1:J:107:ALA:HA</td>
<td>2:J:301:SAH:N3</td>
<td>2.30</td>
<td>0.47</td>
</tr>
<tr>
<td>1:B:246:ARG:HD2</td>
<td>1:B:249:GLU:OE1</td>
<td>2.15</td>
<td>0.47</td>
</tr>
<tr>
<td>1:P:247:ARG:HG3</td>
<td>1:P:263:LEU:HD11</td>
<td>1.95</td>
<td>0.47</td>
</tr>
<tr>
<td>2:B:302:SAH:N</td>
<td>2:B:302:SAH:SD</td>
<td>2.87</td>
<td>0.47</td>
</tr>
<tr>
<td>1:H:197:GLU:HA</td>
<td>1:H:201:ALA:HA</td>
<td>1.97</td>
<td>0.47</td>
</tr>
<tr>
<td>1:R:168:TRP:NE1</td>
<td>1:R:219:GLY:O</td>
<td>2.48</td>
<td>0.47</td>
</tr>
<tr>
<td>1:D:223:LEU:HD11</td>
<td>1:D:285[B]:ARG:HD3</td>
<td>1.96</td>
<td>0.47</td>
</tr>
<tr>
<td>1:M:247:ARG:HG3</td>
<td>1:M:263:LEU:HD11</td>
<td>1.96</td>
<td>0.47</td>
</tr>
<tr>
<td>1:A:139:LEU:H</td>
<td>1:A:166:GLU:HG2</td>
<td>1.80</td>
<td>0.47</td>
</tr>
<tr>
<td>1:L:75:PRO:HG2</td>
<td>1:L:99:ARG:HG3</td>
<td>1.96</td>
<td>0.47</td>
</tr>
<tr>
<td>1:P:75:PRO:HG2</td>
<td>1:P:99:ARG:HG3</td>
<td>1.97</td>
<td>0.47</td>
</tr>
<tr>
<td>1:B:42:PHE:HZ</td>
<td>1:B:57:MET:HB3</td>
<td>1.79</td>
<td>0.47</td>
</tr>
<tr>
<td>1:D:50:GLN:NE2</td>
<td>1:F:285:ARG:HH12</td>
<td>2.13</td>
<td>0.47</td>
</tr>
<tr>
<td>1:M:36:VAL:HB</td>
<td>2:N:301:SAH:HB2</td>
<td>1.96</td>
<td>0.47</td>
</tr>
<tr>
<td>1:G:201:ALA:HB1</td>
<td>1:H:17:VAL:HG22</td>
<td>1.97</td>
<td>0.47</td>
</tr>
<tr>
<td>1:K:171:LEU:O</td>
<td>1:K:286:LYS:NZ</td>
<td>2.37</td>
<td>0.47</td>
</tr>
<tr>
<td>1:O:40:LEU:HD23</td>
<td>1:P:64:ARG:HG2</td>
<td>1.97</td>
<td>0.47</td>
</tr>
<tr>
<td>1:K:42:PHE:HZ</td>
<td>1:K:57:MET:HB3</td>
<td>1.80</td>
<td>0.46</td>
</tr>
<tr>
<td>1:R:91:THR:HG21</td>
<td>1:R:152:ILE:CD1</td>
<td>2.45</td>
<td>0.46</td>
</tr>
<tr>
<td>1:E:139:LEU:H</td>
<td>1:E:166:GLU:HG2</td>
<td>1.81</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:156:CYS:HA</td>
<td>1:A:160:ARG:NH2</td>
<td>2.29</td>
<td>0.46</td>
</tr>
<tr>
<td>1:C:138:ARG:HZ</td>
<td>3:C:414:HOH:O</td>
<td>2.63</td>
<td>0.46</td>
</tr>
<tr>
<td>2:O:301:SAH:HB2</td>
<td>1:P:36:VAL:HB</td>
<td>1.98</td>
<td>0.46</td>
</tr>
<tr>
<td>1:R:239:PHE:HE2</td>
<td>1:R:266:LEU:HD21</td>
<td>1.80</td>
<td>0.46</td>
</tr>
<tr>
<td>1:C:246:ARG:HH22</td>
<td>1:D:30:LEU:HB3</td>
<td>1.81</td>
<td>0.46</td>
</tr>
<tr>
<td>1:R:82:LEU:HB3</td>
<td>1:R:149:ALA:HB2</td>
<td>1.96</td>
<td>0.46</td>
</tr>
<tr>
<td>1:C:94:LYS:NZ</td>
<td>3:C:409:HOH:O</td>
<td>2.36</td>
<td>0.46</td>
</tr>
<tr>
<td>1:I:237:ASN:HD22</td>
<td>1:J:54:LEU:HD13</td>
<td>1.80</td>
<td>0.46</td>
</tr>
<tr>
<td>1:E:19:ASP:HB3</td>
<td>1:E:23:LYS:NZ</td>
<td>2.30</td>
<td>0.46</td>
</tr>
<tr>
<td>1:H:152:ILE:HG23</td>
<td>1:H:180:LEU:HD22</td>
<td>1.97</td>
<td>0.46</td>
</tr>
</tbody>
</table>

Continued on next page...
<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:R:114:ALA:O</td>
<td>1:R:118:ARG:HG3</td>
<td>2.16</td>
<td>0.46</td>
</tr>
<tr>
<td>1:A:107:ALA:O</td>
<td>1:A:113:VAL:HA</td>
<td>2.16</td>
<td>0.46</td>
</tr>
<tr>
<td>1:B:29:HIS:HA</td>
<td>1:B:33:GLY:O</td>
<td>2.16</td>
<td>0.46</td>
</tr>
<tr>
<td>1:G:135:ASP:OD1</td>
<td>1:G:136:ALA:N</td>
<td>2.49</td>
<td>0.46</td>
</tr>
<tr>
<td>1:I:143:ASP:OD1</td>
<td>1:I:143:ASP:N</td>
<td>2.49</td>
<td>0.46</td>
</tr>
<tr>
<td>1:K:186:GLU:HB3</td>
<td>1:K:187:GLU:H</td>
<td>1.60</td>
<td>0.46</td>
</tr>
<tr>
<td>1:C:195:LEU:HD23</td>
<td>1:C:195:LEU:HA</td>
<td>1.84</td>
<td>0.45</td>
</tr>
<tr>
<td>1:A:23:LYS:HG2</td>
<td>1:Q:138:ARG:HH22</td>
<td>1.81</td>
<td>0.45</td>
</tr>
<tr>
<td>1:E:239:PHE:HB2</td>
<td>1:F:32:LEU:HD21</td>
<td>1.98</td>
<td>0.45</td>
</tr>
<tr>
<td>1:M:203:ASN:OD1</td>
<td>1:N:11:GLN:N</td>
<td>2.47</td>
<td>0.45</td>
</tr>
<tr>
<td>1:M:25:GLY:N</td>
<td>3:M:401:HOH:O</td>
<td>1.94</td>
<td>0.45</td>
</tr>
<tr>
<td>1:R:188:LEU:O</td>
<td>1:R:189:THR:OG1</td>
<td>2.28</td>
<td>0.45</td>
</tr>
<tr>
<td>1:D:176:ASP:OD1</td>
<td>1:D:285[B]:ARG:HG3</td>
<td>2.17</td>
<td>0.45</td>
</tr>
<tr>
<td>1:R:232:LEU:HD22</td>
<td>1:R:279:PHE:HD1</td>
<td>1.81</td>
<td>0.45</td>
</tr>
<tr>
<td>1:C:65:TYR:OH</td>
<td>1:C:180:LEU:HD23</td>
<td>2.16</td>
<td>0.45</td>
</tr>
<tr>
<td>1:R:139:LEU:H</td>
<td>1:R:166:GLU:HG2</td>
<td>1.81</td>
<td>0.45</td>
</tr>
<tr>
<td>1:O:258:PHE:N</td>
<td>3:O:403:HOH:O</td>
<td>2.49</td>
<td>0.45</td>
</tr>
<tr>
<td>1:O:143:ASP:N</td>
<td>1:O:143:ASP:OD1</td>
<td>2.50</td>
<td>0.45</td>
</tr>
<tr>
<td>1:R:150:TRP:HB3</td>
<td>1:R:178:LEU:HB3</td>
<td>1.98</td>
<td>0.45</td>
</tr>
<tr>
<td>1:R:189:THR:O</td>
<td>1:R:193:THR:HG23</td>
<td>2.17</td>
<td>0.45</td>
</tr>
<tr>
<td>1:D:75:PRO:HG2</td>
<td>1:D:99:ARG:HG3</td>
<td>1.99</td>
<td>0.45</td>
</tr>
<tr>
<td>1:M:17:VAL:HG11</td>
<td>2:N:301:SAH:H8</td>
<td>1.98</td>
<td>0.45</td>
</tr>
<tr>
<td>1:B:213:ASP:OD1</td>
<td>3:B:405:HOH:O</td>
<td>2.21</td>
<td>0.45</td>
</tr>
<tr>
<td>1:R:114:ALA:HB3</td>
<td>1:R:118:ARG:HH21</td>
<td>1.82</td>
<td>0.45</td>
</tr>
<tr>
<td>1:C:215:VAL:HG12</td>
<td>3:C:402:HOH:O</td>
<td>2.16</td>
<td>0.45</td>
</tr>
<tr>
<td>1:R:62:GLN:O</td>
<td>1:R:65:TYR:HB3</td>
<td>2.17</td>
<td>0.45</td>
</tr>
<tr>
<td>1:C:17:VAL:HG11</td>
<td>2:D:301:SAH:H8</td>
<td>1.99</td>
<td>0.45</td>
</tr>
<tr>
<td>1:I:91:THR:HG22</td>
<td>1:I:150:TRP:CZ2</td>
<td>2.52</td>
<td>0.45</td>
</tr>
<tr>
<td>1:F:271:GLU:OE2</td>
<td>1:F:275:ARG:NE</td>
<td>2.50</td>
<td>0.44</td>
</tr>
<tr>
<td>1:M:84:ILE:O</td>
<td>3:M:408:HOH:O</td>
<td>2.20</td>
<td>0.44</td>
</tr>
<tr>
<td>1:R:103:VAL:O</td>
<td>3:R:413:HOH:O</td>
<td>2.21</td>
<td>0.44</td>
</tr>
<tr>
<td>1:C:66:THR:HG23</td>
<td>1:C:91:THR:HG23</td>
<td>1.98</td>
<td>0.44</td>
</tr>
<tr>
<td>1:L:29:HIS:HA</td>
<td>1:L:33:GLY:O</td>
<td>2.16</td>
<td>0.44</td>
</tr>
<tr>
<td>1:O:51:ASP:H</td>
<td>1:O:56:THR:HG21</td>
<td>1.82</td>
<td>0.44</td>
</tr>
<tr>
<td>1:R:164:LEU:HD13</td>
<td>1:R:215:VAL:HG23</td>
<td>1.98</td>
<td>0.44</td>
</tr>
<tr>
<td>1:C:223:LEU:HD11</td>
<td>1:C:285:ARG:HB2</td>
<td>1.98</td>
<td>0.44</td>
</tr>
<tr>
<td>1:C:42:PHE:HZ</td>
<td>1:C:57:MET:HB3</td>
<td>1.82</td>
<td>0.44</td>
</tr>
<tr>
<td>1:D:134:ALA:HZ</td>
<td>1:D:140:PRO:HD3</td>
<td>2.00</td>
<td>0.44</td>
</tr>
</tbody>
</table>

Continued from previous page...
Continued from previous page...

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:E:168:TRP:CE2</td>
<td>1:E:286:LYS:HG3</td>
<td>2.52</td>
<td>0.44</td>
</tr>
<tr>
<td>1:L:174:GLY:O</td>
<td>1:L:285:ARG:NH1</td>
<td>2.50</td>
<td>0.44</td>
</tr>
<tr>
<td>1:N:171:LEU:O</td>
<td>1:N:286:LYS:NZ</td>
<td>2.35</td>
<td>0.44</td>
</tr>
<tr>
<td>1:J:66:THR:HG23</td>
<td>1:J:91:THR:HG23</td>
<td>2.00</td>
<td>0.44</td>
</tr>
<tr>
<td>1:H:87:GLY:O</td>
<td>1:H:112:GLN:HB3</td>
<td>2.17</td>
<td>0.44</td>
</tr>
<tr>
<td>1:R:215:VAL:O</td>
<td>1:R:218:ALA:HB3</td>
<td>2.18</td>
<td>0.44</td>
</tr>
<tr>
<td>1:J:66:THR:HG23</td>
<td>1:E:91:THR:HG23</td>
<td>2.00</td>
<td>0.44</td>
</tr>
<tr>
<td>1:L:188:LEU:N</td>
<td>3:L:412:HOH:O</td>
<td>2.50</td>
<td>0.44</td>
</tr>
<tr>
<td>1:G:186:GLU:HB3</td>
<td>1:G:187:GLU:H</td>
<td>1.64</td>
<td>0.44</td>
</tr>
<tr>
<td>1:O:206:PRO:HG2</td>
<td>1:O:211:PHE:HB2</td>
<td>1.98</td>
<td>0.44</td>
</tr>
<tr>
<td>1:R:29:HIS:HA</td>
<td>1:R:33:GLY:O</td>
<td>2.18</td>
<td>0.44</td>
</tr>
<tr>
<td>1:R:93:LEU:O</td>
<td>1:R:97:ARG:HG3</td>
<td>2.17</td>
<td>0.44</td>
</tr>
<tr>
<td>1:Q:199:LEU:HD22</td>
<td>1:B:262:LEU:HD23</td>
<td>2.00</td>
<td>0.44</td>
</tr>
<tr>
<td>1:Q:37:HIS:O</td>
<td>1:R:62:GLN:NE2</td>
<td>2.39</td>
<td>0.44</td>
</tr>
<tr>
<td>1:D:181:GLU:HG3</td>
<td>1:D:182:SER:O</td>
<td>2.18</td>
<td>0.43</td>
</tr>
<tr>
<td>1:J:198:THR:OG1</td>
<td>3:J:405:HOH:O</td>
<td>2.21</td>
<td>0.43</td>
</tr>
<tr>
<td>1:K:112:GLN:OE1</td>
<td>2:K:301:SAH:O3'</td>
<td>2.24</td>
<td>0.43</td>
</tr>
<tr>
<td>1:P:278:ARG:NH2</td>
<td>3:P:413:HOH:O</td>
<td>2.42</td>
<td>0.43</td>
</tr>
<tr>
<td>1:P:101:ILE:O</td>
<td>1:P:128:ARG:NH1</td>
<td>2.51</td>
<td>0.43</td>
</tr>
<tr>
<td>1:Q:278:ARG:NH1</td>
<td>3:Q:413:HOH:O</td>
<td>2.48</td>
<td>0.43</td>
</tr>
<tr>
<td>1:M:21:TYR:HB2</td>
<td>1:N:109:SER:HB2</td>
<td>2.01</td>
<td>0.43</td>
</tr>
<tr>
<td>1:O:160:ARG:CZ</td>
<td>1:O:206:PRO:HD3</td>
<td>2.49</td>
<td>0.43</td>
</tr>
<tr>
<td>1:B:253:ARG:O</td>
<td>1:Q:138:ARG:HD3</td>
<td>2.18</td>
<td>0.43</td>
</tr>
<tr>
<td>1:Q:22:ASP:HA</td>
<td>1:R:111:GLU:HB3</td>
<td>2.01</td>
<td>0.43</td>
</tr>
<tr>
<td>1:R:207:ARG:O</td>
<td>1:R:211:PHE:N</td>
<td>2.42</td>
<td>0.43</td>
</tr>
<tr>
<td>1:R:215:VAL:HA</td>
<td>1:R:218:ALA:HB3</td>
<td>2.00</td>
<td>0.43</td>
</tr>
<tr>
<td>1:G:156:CYS:O</td>
<td>1:G:203:ASN:HB2</td>
<td>2.18</td>
<td>0.43</td>
</tr>
<tr>
<td>1:K:158:MET:O</td>
<td>1:K:203:ASN:ND2</td>
<td>2.52</td>
<td>0.43</td>
</tr>
<tr>
<td>1:M:114:ALA:O</td>
<td>1:M:118:ARG:HG3</td>
<td>2.19</td>
<td>0.43</td>
</tr>
<tr>
<td>1:Q:288:ALA:N</td>
<td>3:Q:405:HOH:O</td>
<td>2.19</td>
<td>0.43</td>
</tr>
<tr>
<td>1:B:188:LEU:H</td>
<td>1:B:188:LEU:HD12</td>
<td>1.84</td>
<td>0.43</td>
</tr>
<tr>
<td>1:G:186:GLU:O</td>
<td>1:G:207:ARG:NH2</td>
<td>2.52</td>
<td>0.43</td>
</tr>
<tr>
<td>1:P:287:PRO:C</td>
<td>3:P:407:HOH:O</td>
<td>2.57</td>
<td>0.43</td>
</tr>
<tr>
<td>1:P:80:HIS:NE2</td>
<td>1:P:104:THR:OG1</td>
<td>2.38</td>
<td>0.43</td>
</tr>
<tr>
<td>1:N:225:LEU:O</td>
<td>1:Q:224:SER:HA</td>
<td>2.19</td>
<td>0.43</td>
</tr>
<tr>
<td>1:C:157:HIS:ND1</td>
<td>1:C:201:ALA:O</td>
<td>2.48</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:48:VAL:HB</td>
<td>1:E:285:ARG:HH21</td>
<td>1.84</td>
<td>0.43</td>
</tr>
</tbody>
</table>

Continued on next page...
Continued on previous page...

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:G:240:ALA:HA</td>
<td>1:G:266:LEU:HD13</td>
<td>1.99</td>
<td>0.43</td>
</tr>
<tr>
<td>1:L:226:LYS:NZ</td>
<td>3:L:205:HOH:O</td>
<td>2.21</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:164:LEU:HD12</td>
<td>1:A:214:ILE:HG22</td>
<td>2.01</td>
<td>0.43</td>
</tr>
<tr>
<td>1:A:37:HIS:HD2</td>
<td>2:B:301:SAH:OXT</td>
<td>2.01</td>
<td>0.43</td>
</tr>
<tr>
<td>1:G:208:LEU:HA</td>
<td>1:G:208:LEU:HD22</td>
<td>1.91</td>
<td>0.43</td>
</tr>
<tr>
<td>1:Q:31:THR:HG22</td>
<td>1:R:246:ARG:HH21</td>
<td>1.84</td>
<td>0.43</td>
</tr>
<tr>
<td>1:B:143:ASP:N</td>
<td>1:B:143:ASP:OD1</td>
<td>2.50</td>
<td>0.42</td>
</tr>
<tr>
<td>1:R:53:GLU:O</td>
<td>1:R:57:MET:HG3</td>
<td>2.18</td>
<td>0.42</td>
</tr>
<tr>
<td>1:H:271:GLU:OE2</td>
<td>1:H:275:ARG:NE</td>
<td>2.52</td>
<td>0.42</td>
</tr>
<tr>
<td>2:G:301:SAH:HB2</td>
<td>1:H:36:VAL:HB</td>
<td>1.99</td>
<td>0.42</td>
</tr>
<tr>
<td>1:J:144:GLU:HG3</td>
<td>3:J:404:HOH:O</td>
<td>2.18</td>
<td>0.42</td>
</tr>
<tr>
<td>1:N:286:LYS:HA</td>
<td>1:N:287:PRO:HD3</td>
<td>1.93</td>
<td>0.42</td>
</tr>
<tr>
<td>1:O:246:ARG:NH2</td>
<td>1:P:30:LEU:O</td>
<td>2.52</td>
<td>0.42</td>
</tr>
<tr>
<td>1:P:168:TRP:CE2</td>
<td>1:P:286:LYS:HE3</td>
<td>2.53</td>
<td>0.42</td>
</tr>
<tr>
<td>1:F:66:THR:HG23</td>
<td>1:F:91:THR:HG23</td>
<td>2.01</td>
<td>0.42</td>
</tr>
<tr>
<td>1:J:150:TRP:HB3</td>
<td>1:J:178:LEU:HB3</td>
<td>2.02</td>
<td>0.42</td>
</tr>
<tr>
<td>1:J:43:PRO:HG2</td>
<td>1:J:46:ALA:HB2</td>
<td>2.01</td>
<td>0.42</td>
</tr>
<tr>
<td>1:K:170:VAL:HG22</td>
<td>3:K:401:HOH:O</td>
<td>2.18</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:240:ALA:HA</td>
<td>1:A:266:LEU:HD13</td>
<td>2.02</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:266:LEU:HD13</td>
<td>1:A:266:LEU:HD13</td>
<td>2.01</td>
<td>0.42</td>
</tr>
<tr>
<td>1:J:66:THR:HG23</td>
<td>1:J:91:THR:HG23</td>
<td>2.01</td>
<td>0.42</td>
</tr>
<tr>
<td>1:M:159:ASP:HB2</td>
<td>1:N:10:GLN:CD</td>
<td>2.40</td>
<td>0.42</td>
</tr>
<tr>
<td>1:R:215:VAL:HG13</td>
<td>1:R:220:PHE:HB2</td>
<td>2.00</td>
<td>0.42</td>
</tr>
<tr>
<td>1:K:143:ASP:OD1</td>
<td>1:K:143:ASP:N</td>
<td>2.50</td>
<td>0.42</td>
</tr>
<tr>
<td>1:Q:11:GLN:OE1</td>
<td>1:R:197:GLU:HB2</td>
<td>2.20</td>
<td>0.42</td>
</tr>
<tr>
<td>1:R:181:GLU:HG2</td>
<td>1:R:211:PHE:CE1</td>
<td>2.55</td>
<td>0.42</td>
</tr>
<tr>
<td>1:E:51:ASP:H</td>
<td>1:E:56:THR:HG21</td>
<td>1.85</td>
<td>0.42</td>
</tr>
<tr>
<td>1:G:274:ILE:HG12</td>
<td>1:H:52:MET:HB2</td>
<td>2.01</td>
<td>0.42</td>
</tr>
<tr>
<td>1:H:75:PRO:HG2</td>
<td>1:H:99:ARG:HG3</td>
<td>2.01</td>
<td>0.42</td>
</tr>
<tr>
<td>1:R:171:LEU:HG</td>
<td>3:R:416:HOH:O</td>
<td>2.20</td>
<td>0.42</td>
</tr>
<tr>
<td>1:R:192:GLU:OE1</td>
<td>1:R:276:LYS:NZ</td>
<td>2.36</td>
<td>0.42</td>
</tr>
<tr>
<td>1:A:36:VAL:HB</td>
<td>2:B:301:SAH:HB2</td>
<td>2.02</td>
<td>0.42</td>
</tr>
<tr>
<td>1:C:211:PHE:O</td>
<td>1:C:215:VAL:HG23</td>
<td>2.19</td>
<td>0.42</td>
</tr>
<tr>
<td>1:C:271:GLU:OE2</td>
<td>1:C:275:ARG:NE</td>
<td>2.53</td>
<td>0.42</td>
</tr>
<tr>
<td>1:C:29:HIS:HA</td>
<td>1:C:33:GLY:O</td>
<td>2.19</td>
<td>0.42</td>
</tr>
<tr>
<td>1:E:198:THR:CB</td>
<td>3:E:405:HOH:O</td>
<td>2.68</td>
<td>0.42</td>
</tr>
<tr>
<td>1:J:107:ALA:HB1</td>
<td>2:J:301:SAH:O2'</td>
<td>2.20</td>
<td>0.42</td>
</tr>
</tbody>
</table>

Continued on next page...
<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:C:189:THR:O</td>
<td>1:C:193:THR:HG23</td>
<td>2.20</td>
<td>0.42</td>
</tr>
<tr>
<td>1:C:275:ARG:NE</td>
<td>1:C:275:ARG:NE</td>
<td>2.52</td>
<td>0.42</td>
</tr>
<tr>
<td>1:J:54:LEU:HD13</td>
<td>1:J:54:LEU:HD13</td>
<td>2.34</td>
<td>0.42</td>
</tr>
<tr>
<td>1:H:157:HIS:HB3</td>
<td>1:H:157:HIS:HB3</td>
<td>2.02</td>
<td>0.41</td>
</tr>
<tr>
<td>1:266:LEU:HD13</td>
<td>1:266:LEU:HD13</td>
<td>2.02</td>
<td>0.41</td>
</tr>
<tr>
<td>1:I:33:GLY:O</td>
<td>1:I:33:GLY:O</td>
<td>2.20</td>
<td>0.41</td>
</tr>
<tr>
<td>1:206:PRO:HD3</td>
<td>1:206:PRO:HD3</td>
<td>2.50</td>
<td>0.41</td>
</tr>
<tr>
<td>1:Q:50:GLN:OE1</td>
<td>1:Q:50:GLN:OE1</td>
<td>2.20</td>
<td>0.41</td>
</tr>
<tr>
<td>1:F:160:ARG:NE2</td>
<td>1:F:160:ARG:NE2</td>
<td>2.35</td>
<td>0.41</td>
</tr>
<tr>
<td>1:L:182:SER:O</td>
<td>1:L:182:SER:O</td>
<td>2.20</td>
<td>0.41</td>
</tr>
<tr>
<td>1:156:TRP:O</td>
<td>1:156:TRP:O</td>
<td>2.02</td>
<td>0.41</td>
</tr>
<tr>
<td>1:R:56:THR:HG21</td>
<td>1:R:56:THR:HG21</td>
<td>1.85</td>
<td>0.41</td>
</tr>
<tr>
<td>1:206:PRO:HD3</td>
<td>1:206:PRO:HD3</td>
<td>2.51</td>
<td>0.41</td>
</tr>
<tr>
<td>1:156:TRP:O</td>
<td>1:156:TRP:O</td>
<td>2.02</td>
<td>0.41</td>
</tr>
<tr>
<td>1:E:277:THR:OG1</td>
<td>1:E:277:THR:OG1</td>
<td>2.21</td>
<td>0.41</td>
</tr>
<tr>
<td>1:241:LEU:HD13</td>
<td>1:241:LEU:HD13</td>
<td>2.02</td>
<td>0.41</td>
</tr>
<tr>
<td>1:R:62:GLN:O</td>
<td>1:R:62:GLN:O</td>
<td>2.02</td>
<td>0.41</td>
</tr>
<tr>
<td>1:A:91:THR:HG23</td>
<td>1:A:91:THR:HG23</td>
<td>2.01</td>
<td>0.41</td>
</tr>
<tr>
<td>1:H:57:MET:HB3</td>
<td>1:H:57:MET:HB3</td>
<td>2.52</td>
<td>0.41</td>
</tr>
<tr>
<td>1:113:ILE:HD13</td>
<td>1:113:ILE:HD13</td>
<td>1.76</td>
<td>0.41</td>
</tr>
<tr>
<td>1:208:LEU:HA</td>
<td>1:208:LEU:HA</td>
<td>1.84</td>
<td>0.41</td>
</tr>
<tr>
<td>1:L:17:VAL:HG1</td>
<td>1:L:17:VAL:HG1</td>
<td>2.03</td>
<td>0.41</td>
</tr>
<tr>
<td>1:M:166:GLU:HG2</td>
<td>1:M:166:GLU:HG2</td>
<td>1.86</td>
<td>0.41</td>
</tr>
<tr>
<td>1:E:33:GLY:O</td>
<td>1:E:33:GLY:O</td>
<td>2.21</td>
<td>0.41</td>
</tr>
<tr>
<td>1:J:33:GLY:O</td>
<td>1:J:33:GLY:O</td>
<td>2.21</td>
<td>0.41</td>
</tr>
<tr>
<td>1:O:276:LYS:NZ</td>
<td>1:O:276:LYS:NZ</td>
<td>2.41</td>
<td>0.41</td>
</tr>
<tr>
<td>1:B:237:ASN:ND2</td>
<td>1:B:237:ASN:ND2</td>
<td>2.36</td>
<td>0.41</td>
</tr>
<tr>
<td>1:K:180:LEU:CD2</td>
<td>1:K:180:LEU:CD2</td>
<td>2.51</td>
<td>0.41</td>
</tr>
<tr>
<td>1:N:233:ALA:HB2</td>
<td>1:N:233:ALA:HB2</td>
<td>2.03</td>
<td>0.41</td>
</tr>
<tr>
<td>1:R:218:ALA:CB</td>
<td>1:R:218:ALA:CB</td>
<td>2.49</td>
<td>0.41</td>
</tr>
<tr>
<td>1:O:266:LEU:HD13</td>
<td>1:O:266:LEU:HD13</td>
<td>2.02</td>
<td>0.41</td>
</tr>
<tr>
<td>1:J:301:SAH:N</td>
<td>1:J:301:SAH:N</td>
<td>2.54</td>
<td>0.41</td>
</tr>
<tr>
<td>1:D:33:GLY:O</td>
<td>1:D:33:GLY:O</td>
<td>2.22</td>
<td>0.40</td>
</tr>
<tr>
<td>1:H:208:LEU:HA</td>
<td>1:H:208:LEU:HA</td>
<td>1.89</td>
<td>0.40</td>
</tr>
</tbody>
</table>
All (1) symmetry-related close contacts are listed below. The label for Atom-2 includes the symmetry operator and encoded unit-cell translations to be applied.

<table>
<thead>
<tr>
<th>Atom-1</th>
<th>Atom-2</th>
<th>Interatomic distance (Å)</th>
<th>Clash overlap (Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:E:40:LEU:HD23</td>
<td>1:F:64:ARG:HG2</td>
<td>2.03</td>
<td>0.40</td>
</tr>
<tr>
<td>1:L:197:GLU:HA</td>
<td>1:L:201:ALA:HA</td>
<td>2.02</td>
<td>0.40</td>
</tr>
<tr>
<td>1:H:115:ALA:HA</td>
<td>1:H:118:ARG:HD2</td>
<td>2.03</td>
<td>0.40</td>
</tr>
<tr>
<td>1:H:43:PRO:HG2</td>
<td>1:H:46:ALA:HB2</td>
<td>2.03</td>
<td>0.40</td>
</tr>
<tr>
<td>1:M:17:VAL:HG21</td>
<td>1:N:157:HIS:HB3</td>
<td>2.03</td>
<td>0.40</td>
</tr>
<tr>
<td>1:O:66:THR:HG23</td>
<td>1:O:91:THR:HG23</td>
<td>2.03</td>
<td>0.40</td>
</tr>
<tr>
<td>1:R:136:ALA:HB3</td>
<td>1:R:158:MET:SD</td>
<td>2.60</td>
<td>0.40</td>
</tr>
<tr>
<td>1:B:138:ARG:HD2</td>
<td>3:B:473:HOH:O</td>
<td>2.21</td>
<td>0.40</td>
</tr>
</tbody>
</table>

5.3 Torsion angles

5.3.1 Protein backbone

In the following table, the Percentiles column shows the percent Ramachandran outliers of the chain as a percentile score with respect to all X-ray entries followed by that with respect to entries of similar resolution.

The Analysed column shows the number of residues for which the backbone conformation was analysed, and the total number of residues.

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Analysed</th>
<th>Favoured</th>
<th>Allowed</th>
<th>Outliers</th>
<th>Percentiles</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A</td>
<td>281/297 (95%)</td>
<td>275 (98%)</td>
<td>4 (1%)</td>
<td>2 (1%)</td>
<td>24</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>279/297 (94%)</td>
<td>275 (99%)</td>
<td>4 (1%)</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>278/297 (94%)</td>
<td>269 (97%)</td>
<td>5 (2%)</td>
<td>4 (1%)</td>
<td>12</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>279/297 (94%)</td>
<td>275 (99%)</td>
<td>3 (1%)</td>
<td>1 (0%)</td>
<td>36</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>277/297 (93%)</td>
<td>275 (99%)</td>
<td>2 (1%)</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>278/297 (94%)</td>
<td>274 (99%)</td>
<td>4 (1%)</td>
<td>0</td>
<td>100</td>
</tr>
</tbody>
</table>

Continued on next page...
Continued from previous page...

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Analysed</th>
<th>Favoured</th>
<th>Allowed</th>
<th>Outliers</th>
<th>Percentiles</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>G</td>
<td>278/297 (94%)</td>
<td>267 (96%)</td>
<td>9 (3%)</td>
<td>2 (1%)</td>
<td>24</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>277/297 (93%)</td>
<td>269 (97%)</td>
<td>7 (2%)</td>
<td>1 (0%)</td>
<td>36</td>
</tr>
<tr>
<td>1</td>
<td>I</td>
<td>279/297 (94%)</td>
<td>275 (99%)</td>
<td>3 (1%)</td>
<td>1 (0%)</td>
<td>36</td>
</tr>
<tr>
<td>1</td>
<td>J</td>
<td>279/297 (94%)</td>
<td>273 (98%)</td>
<td>6 (2%)</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>1</td>
<td>K</td>
<td>279/297 (94%)</td>
<td>271 (97%)</td>
<td>7 (2%)</td>
<td>1 (0%)</td>
<td>36</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>278/297 (94%)</td>
<td>272 (98%)</td>
<td>5 (2%)</td>
<td>1 (0%)</td>
<td>36</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>281/297 (95%)</td>
<td>273 (97%)</td>
<td>7 (2%)</td>
<td>1 (0%)</td>
<td>36</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>281/297 (95%)</td>
<td>273 (97%)</td>
<td>6 (2%)</td>
<td>2 (1%)</td>
<td>24</td>
</tr>
<tr>
<td>1</td>
<td>O</td>
<td>278/297 (94%)</td>
<td>270 (97%)</td>
<td>7 (2%)</td>
<td>1 (0%)</td>
<td>36</td>
</tr>
<tr>
<td>1</td>
<td>P</td>
<td>278/297 (94%)</td>
<td>271 (98%)</td>
<td>5 (2%)</td>
<td>2 (1%)</td>
<td>24</td>
</tr>
<tr>
<td>1</td>
<td>Q</td>
<td>281/297 (95%)</td>
<td>274 (98%)</td>
<td>6 (2%)</td>
<td>1 (0%)</td>
<td>36</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>280/297 (94%)</td>
<td>269 (96%)</td>
<td>9 (3%)</td>
<td>2 (1%)</td>
<td>24</td>
</tr>
<tr>
<td>All</td>
<td>All</td>
<td>5021/5346 (94%)</td>
<td>4900 (98%)</td>
<td>99 (2%)</td>
<td>22 (0%)</td>
<td>36</td>
</tr>
</tbody>
</table>

All (22) Ramachandran outliers are listed below:

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>C</td>
<td>126</td>
<td>THR</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>201</td>
<td>ALA</td>
</tr>
<tr>
<td>1</td>
<td>K</td>
<td>188</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>O</td>
<td>188</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>P</td>
<td>188</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>Q</td>
<td>188</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>188</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>10</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>188</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>187</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>188</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>188</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>188</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>188</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>I</td>
<td>188</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>188</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>188</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>10</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>188</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>203</td>
<td>ASN</td>
</tr>
<tr>
<td>1</td>
<td>P</td>
<td>253</td>
<td>ARG</td>
</tr>
</tbody>
</table>

Continued on next page...
Continued from previous page...

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>R</td>
<td>189</td>
<td>THR</td>
</tr>
</tbody>
</table>

5.3.2 Protein sidechains

In the following table, the Percentiles column shows the percent sidechain outliers of the chain as a percentile score with respect to all X-ray entries followed by that with respect to entries of similar resolution.

The Analysed column shows the number of residues for which the sidechain conformation was analysed, and the total number of residues.

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Analysed</th>
<th>Rotameric</th>
<th>Outliers</th>
<th>Percentiles</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A</td>
<td>226/239 (95%)</td>
<td>222 (98%)</td>
<td>4 (2%)</td>
<td>62 84</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>224/239 (94%)</td>
<td>214 (96%)</td>
<td>10 (4%)</td>
<td>30 54</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>223/239 (93%)</td>
<td>216 (97%)</td>
<td>7 (3%)</td>
<td>43 70</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>224/239 (94%)</td>
<td>216 (96%)</td>
<td>8 (4%)</td>
<td>38 65</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>222/239 (93%)</td>
<td>217 (98%)</td>
<td>5 (2%)</td>
<td>53 79</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>223/239 (93%)</td>
<td>219 (96%)</td>
<td>4 (2%)</td>
<td>62 84</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>223/239 (93%)</td>
<td>215 (96%)</td>
<td>8 (4%)</td>
<td>38 65</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>222/239 (93%)</td>
<td>214 (96%)</td>
<td>8 (4%)</td>
<td>38 65</td>
</tr>
<tr>
<td>1</td>
<td>I</td>
<td>224/239 (94%)</td>
<td>217 (97%)</td>
<td>7 (3%)</td>
<td>43 70</td>
</tr>
<tr>
<td>1</td>
<td>J</td>
<td>224/239 (94%)</td>
<td>219 (98%)</td>
<td>5 (2%)</td>
<td>55 80</td>
</tr>
<tr>
<td>1</td>
<td>K</td>
<td>224/239 (94%)</td>
<td>217 (97%)</td>
<td>7 (3%)</td>
<td>43 70</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>223/239 (93%)</td>
<td>216 (97%)</td>
<td>7 (3%)</td>
<td>43 70</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>226/239 (95%)</td>
<td>221 (98%)</td>
<td>5 (2%)</td>
<td>55 80</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>226/239 (95%)</td>
<td>223 (99%)</td>
<td>3 (1%)</td>
<td>71 89</td>
</tr>
<tr>
<td>1</td>
<td>O</td>
<td>223/239 (93%)</td>
<td>214 (96%)</td>
<td>9 (4%)</td>
<td>34 60</td>
</tr>
<tr>
<td>1</td>
<td>P</td>
<td>223/239 (93%)</td>
<td>219 (98%)</td>
<td>4 (2%)</td>
<td>62 84</td>
</tr>
<tr>
<td>1</td>
<td>Q</td>
<td>226/239 (95%)</td>
<td>222 (98%)</td>
<td>4 (2%)</td>
<td>62 84</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>225/239 (94%)</td>
<td>217 (96%)</td>
<td>8 (4%)</td>
<td>38 65</td>
</tr>
<tr>
<td>All</td>
<td>All</td>
<td>4031/4302 (94%)</td>
<td>3918 (97%)</td>
<td>113 (3%)</td>
<td>47 74</td>
</tr>
</tbody>
</table>

All (113) residues with a non-rotameric sidechain are listed below:

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A</td>
<td>150</td>
<td>TRP</td>
</tr>
</tbody>
</table>

Continued on next page...
Continued from previous page...

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A</td>
<td>186</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>208</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>289</td>
<td>VAL</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>45</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>150</td>
<td>TRP</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>158</td>
<td>MET</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>186</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>188</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>190</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>208</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>247</td>
<td>ARG</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>253</td>
<td>ARG</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>289</td>
<td>VAL</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>26</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>126</td>
<td>THR</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>150</td>
<td>TRP</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>186</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>200</td>
<td>TYR</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>208</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>247</td>
<td>ARG</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>10</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>150</td>
<td>TRP</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>158</td>
<td>MET</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>183</td>
<td>VAL</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>186</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>253</td>
<td>ARG</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>285[A]</td>
<td>ARG</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>285[B]</td>
<td>ARG</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>150</td>
<td>TRP</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>183</td>
<td>VAL</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>247</td>
<td>ARG</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>251</td>
<td>THR</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>253</td>
<td>ARG</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>26</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>150</td>
<td>TRP</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>186</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>208</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>36</td>
<td>VAL</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>150</td>
<td>TRP</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>186</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>208</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>247</td>
<td>ARG</td>
</tr>
</tbody>
</table>

Continued on next page...
Continued from previous page...

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>G</td>
<td>251</td>
<td>THR</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>252</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>253</td>
<td>ARG</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>26</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>118</td>
<td>ARG</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>150</td>
<td>TRP</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>186</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>208</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>247</td>
<td>ARG</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>251</td>
<td>THR</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>253</td>
<td>ARG</td>
</tr>
<tr>
<td>1</td>
<td>I</td>
<td>143</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>I</td>
<td>150</td>
<td>TRP</td>
</tr>
<tr>
<td>1</td>
<td>I</td>
<td>186</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>I</td>
<td>208</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>I</td>
<td>253</td>
<td>ARG</td>
</tr>
<tr>
<td>1</td>
<td>I</td>
<td>285</td>
<td>ARG</td>
</tr>
<tr>
<td>1</td>
<td>I</td>
<td>289</td>
<td>VAL</td>
</tr>
<tr>
<td>1</td>
<td>J</td>
<td>26</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>J</td>
<td>150</td>
<td>TRP</td>
</tr>
<tr>
<td>1</td>
<td>J</td>
<td>186</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>J</td>
<td>208</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>J</td>
<td>253</td>
<td>ARG</td>
</tr>
<tr>
<td>1</td>
<td>K</td>
<td>10</td>
<td>GLN</td>
</tr>
<tr>
<td>1</td>
<td>K</td>
<td>143</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>K</td>
<td>150</td>
<td>TRP</td>
</tr>
<tr>
<td>1</td>
<td>K</td>
<td>186</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>K</td>
<td>208</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>K</td>
<td>252</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>K</td>
<td>253</td>
<td>ARG</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>26</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>51</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>63</td>
<td>ASP</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>150</td>
<td>TRP</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>186</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>208</td>
<td>LEU</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>253</td>
<td>ARG</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>36</td>
<td>VAL</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>150</td>
<td>TRP</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>186</td>
<td>GLU</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>253</td>
<td>ARG</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>289</td>
<td>VAL</td>
</tr>
</tbody>
</table>

Continued on next page...
Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (1) such sidechains are listed below:

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>N</td>
<td>231</td>
<td>ASN</td>
</tr>
</tbody>
</table>

5.3.3 RNA

There are no RNA molecules in this entry.
5.4 Non-standard residues in protein, DNA, RNA chains

There are no non-standard protein/DNA/RNA residues in this entry.

5.5 Carbohydrates

There are no carbohydrates in this entry.

5.6 Ligand geometry

19 ligands are modelled in this entry.

In the following table, the Counts columns list the number of bonds (or angles) for which Mogul statistics could be retrieved, the number of bonds (or angles) that are observed in the model and the number of bonds (or angles) that are defined in the Chemical Component Dictionary. The Link column lists molecule types, if any, to which the group is linked. The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 2$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

<table>
<thead>
<tr>
<th>Mol</th>
<th>Type</th>
<th>Chain</th>
<th>Res</th>
<th>Link</th>
<th>Bond lengths</th>
<th>Bond angles</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Counts</td>
<td>RMSZ</td>
</tr>
<tr>
<td>2</td>
<td>SAH</td>
<td>A</td>
<td>301</td>
<td>-</td>
<td>20,28,28</td>
<td>1.13</td>
</tr>
<tr>
<td>2</td>
<td>SAH</td>
<td>B</td>
<td>301</td>
<td>-</td>
<td>20,28,28</td>
<td>1.14</td>
</tr>
<tr>
<td>2</td>
<td>SAH</td>
<td>B</td>
<td>302</td>
<td>-</td>
<td>20,28,28</td>
<td>1.19</td>
</tr>
<tr>
<td>2</td>
<td>SAH</td>
<td>C</td>
<td>301</td>
<td>-</td>
<td>20,28,28</td>
<td>1.14</td>
</tr>
<tr>
<td>2</td>
<td>SAH</td>
<td>D</td>
<td>301</td>
<td>-</td>
<td>20,28,28</td>
<td>1.19</td>
</tr>
<tr>
<td>2</td>
<td>SAH</td>
<td>E</td>
<td>301</td>
<td>-</td>
<td>20,28,28</td>
<td>1.15</td>
</tr>
<tr>
<td>2</td>
<td>SAH</td>
<td>F</td>
<td>301</td>
<td>-</td>
<td>20,28,28</td>
<td>1.19</td>
</tr>
<tr>
<td>2</td>
<td>SAH</td>
<td>G</td>
<td>301</td>
<td>-</td>
<td>20,28,28</td>
<td>1.17</td>
</tr>
<tr>
<td>2</td>
<td>SAH</td>
<td>H</td>
<td>301</td>
<td>-</td>
<td>20,28,28</td>
<td>1.24</td>
</tr>
<tr>
<td>2</td>
<td>SAH</td>
<td>I</td>
<td>301</td>
<td>-</td>
<td>20,28,28</td>
<td>1.12</td>
</tr>
<tr>
<td>2</td>
<td>SAH</td>
<td>J</td>
<td>301</td>
<td>-</td>
<td>20,28,28</td>
<td>1.17</td>
</tr>
<tr>
<td>2</td>
<td>SAH</td>
<td>K</td>
<td>301</td>
<td>-</td>
<td>20,28,28</td>
<td>1.15</td>
</tr>
<tr>
<td>2</td>
<td>SAH</td>
<td>L</td>
<td>301</td>
<td>-</td>
<td>20,28,28</td>
<td>1.18</td>
</tr>
<tr>
<td>2</td>
<td>SAH</td>
<td>M</td>
<td>301</td>
<td>-</td>
<td>20,28,28</td>
<td>1.16</td>
</tr>
<tr>
<td>2</td>
<td>SAH</td>
<td>N</td>
<td>301</td>
<td>-</td>
<td>20,28,28</td>
<td>1.17</td>
</tr>
<tr>
<td>2</td>
<td>SAH</td>
<td>O</td>
<td>301</td>
<td>-</td>
<td>20,28,28</td>
<td>1.15</td>
</tr>
<tr>
<td>2</td>
<td>SAH</td>
<td>P</td>
<td>301</td>
<td>-</td>
<td>20,28,28</td>
<td>1.18</td>
</tr>
<tr>
<td>2</td>
<td>SAH</td>
<td>Q</td>
<td>301</td>
<td>-</td>
<td>20,28,28</td>
<td>1.12</td>
</tr>
</tbody>
</table>
In the following table, the Chirals column lists the number of chiral outliers, the number of chiral centers analysed, the number of these observed in the model and the number defined in the Chemical Component Dictionary. Similar counts are reported in the Torsion and Rings columns. '-' means no outliers of that kind were identified.

<table>
<thead>
<tr>
<th>Mol</th>
<th>Type</th>
<th>Chain</th>
<th>Res</th>
<th>Link</th>
<th>Chirals</th>
<th>Torsions</th>
<th>Rings</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>SAH</td>
<td>A</td>
<td>301</td>
<td>-</td>
<td>0/7/31/31</td>
<td>0/3/3/3</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>SAH</td>
<td>B</td>
<td>301</td>
<td>-</td>
<td>0/7/31/31</td>
<td>0/3/3/3</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>SAH</td>
<td>C</td>
<td>301</td>
<td>-</td>
<td>0/7/31/31</td>
<td>0/3/3/3</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>SAH</td>
<td>D</td>
<td>301</td>
<td>-</td>
<td>0/7/31/31</td>
<td>0/3/3/3</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>SAH</td>
<td>E</td>
<td>301</td>
<td>-</td>
<td>0/7/31/31</td>
<td>0/3/3/3</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>SAH</td>
<td>F</td>
<td>301</td>
<td>-</td>
<td>0/7/31/31</td>
<td>0/3/3/3</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>SAH</td>
<td>G</td>
<td>301</td>
<td>-</td>
<td>0/7/31/31</td>
<td>0/3/3/3</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>SAH</td>
<td>H</td>
<td>301</td>
<td>-</td>
<td>0/7/31/31</td>
<td>0/3/3/3</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>SAH</td>
<td>I</td>
<td>301</td>
<td>-</td>
<td>0/7/31/31</td>
<td>0/3/3/3</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>SAH</td>
<td>J</td>
<td>301</td>
<td>-</td>
<td>0/7/31/31</td>
<td>0/3/3/3</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>SAH</td>
<td>K</td>
<td>301</td>
<td>-</td>
<td>0/7/31/31</td>
<td>0/3/3/3</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>SAH</td>
<td>L</td>
<td>301</td>
<td>-</td>
<td>0/7/31/31</td>
<td>0/3/3/3</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>SAH</td>
<td>M</td>
<td>301</td>
<td>-</td>
<td>0/7/31/31</td>
<td>0/3/3/3</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>SAH</td>
<td>N</td>
<td>301</td>
<td>-</td>
<td>0/7/31/31</td>
<td>0/3/3/3</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>SAH</td>
<td>O</td>
<td>301</td>
<td>-</td>
<td>0/7/31/31</td>
<td>0/3/3/3</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>SAH</td>
<td>P</td>
<td>301</td>
<td>-</td>
<td>0/7/31/31</td>
<td>0/3/3/3</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>SAH</td>
<td>Q</td>
<td>301</td>
<td>-</td>
<td>0/7/31/31</td>
<td>0/3/3/3</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>SAH</td>
<td>R</td>
<td>301</td>
<td>-</td>
<td>0/7/31/31</td>
<td>0/3/3/3</td>
<td></td>
</tr>
</tbody>
</table>

All (38) bond length outliers are listed below:

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
<th>Atoms</th>
<th>Z</th>
<th>Observed(Å)</th>
<th>Ideal(Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Q</td>
<td>301</td>
<td>SAH</td>
<td>C2-N1</td>
<td>2.30</td>
<td>1.38</td>
<td>1.33</td>
</tr>
<tr>
<td>2</td>
<td>C</td>
<td>301</td>
<td>SAH</td>
<td>C2-N1</td>
<td>2.34</td>
<td>1.38</td>
<td>1.33</td>
</tr>
<tr>
<td>2</td>
<td>J</td>
<td>301</td>
<td>SAH</td>
<td>C2-N1</td>
<td>2.36</td>
<td>1.38</td>
<td>1.33</td>
</tr>
<tr>
<td>2</td>
<td>F</td>
<td>301</td>
<td>SAH</td>
<td>C2-N1</td>
<td>2.36</td>
<td>1.38</td>
<td>1.33</td>
</tr>
<tr>
<td>2</td>
<td>M</td>
<td>301</td>
<td>SAH</td>
<td>C2-N1</td>
<td>2.37</td>
<td>1.38</td>
<td>1.33</td>
</tr>
<tr>
<td>2</td>
<td>O</td>
<td>301</td>
<td>SAH</td>
<td>C2-N1</td>
<td>2.38</td>
<td>1.38</td>
<td>1.33</td>
</tr>
<tr>
<td>2</td>
<td>P</td>
<td>301</td>
<td>SAH</td>
<td>C2-N1</td>
<td>2.40</td>
<td>1.38</td>
<td>1.33</td>
</tr>
<tr>
<td>2</td>
<td>T</td>
<td>301</td>
<td>SAH</td>
<td>C2-N1</td>
<td>2.41</td>
<td>1.38</td>
<td>1.33</td>
</tr>
<tr>
<td>2</td>
<td>K</td>
<td>301</td>
<td>SAH</td>
<td>C2-N1</td>
<td>2.42</td>
<td>1.38</td>
<td>1.33</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>301</td>
<td>SAH</td>
<td>C2-N1</td>
<td>2.44</td>
<td>1.38</td>
<td>1.33</td>
</tr>
<tr>
<td>2</td>
<td>G</td>
<td>301</td>
<td>SAH</td>
<td>C2-N1</td>
<td>2.45</td>
<td>1.38</td>
<td>1.33</td>
</tr>
</tbody>
</table>

Continued on next page...
Continued from previous page...

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
<th>Atoms</th>
<th>Z</th>
<th>Observed(Å)</th>
<th>Ideal(Å)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>N</td>
<td>301</td>
<td>SAH</td>
<td>C2-N1</td>
<td>2.46</td>
<td>1.38</td>
<td>1.33</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>302</td>
<td>SAH</td>
<td>C2-N1</td>
<td>2.47</td>
<td>1.38</td>
<td>1.33</td>
</tr>
<tr>
<td>2</td>
<td>D</td>
<td>301</td>
<td>SAH</td>
<td>C2-N1</td>
<td>2.48</td>
<td>1.38</td>
<td>1.33</td>
</tr>
<tr>
<td>2</td>
<td>L</td>
<td>301</td>
<td>SAH</td>
<td>C2-N1</td>
<td>2.48</td>
<td>1.38</td>
<td>1.33</td>
</tr>
<tr>
<td>2</td>
<td>E</td>
<td>301</td>
<td>SAH</td>
<td>C2-N1</td>
<td>2.48</td>
<td>1.38</td>
<td>1.33</td>
</tr>
<tr>
<td>2</td>
<td>R</td>
<td>301</td>
<td>SAH</td>
<td>C2-N1</td>
<td>2.48</td>
<td>1.38</td>
<td>1.33</td>
</tr>
<tr>
<td>2</td>
<td>H</td>
<td>301</td>
<td>SAH</td>
<td>C2-N1</td>
<td>2.51</td>
<td>1.38</td>
<td>1.33</td>
</tr>
<tr>
<td>2</td>
<td>A</td>
<td>301</td>
<td>SAH</td>
<td>C2-N1</td>
<td>2.52</td>
<td>1.38</td>
<td>1.33</td>
</tr>
<tr>
<td>2</td>
<td>I</td>
<td>301</td>
<td>SAH</td>
<td>C2-N3</td>
<td>3.58</td>
<td>1.38</td>
<td>1.32</td>
</tr>
<tr>
<td>2</td>
<td>Q</td>
<td>301</td>
<td>SAH</td>
<td>C2-N3</td>
<td>3.60</td>
<td>1.38</td>
<td>1.32</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>301</td>
<td>SAH</td>
<td>C2-N3</td>
<td>3.62</td>
<td>1.38</td>
<td>1.32</td>
</tr>
<tr>
<td>2</td>
<td>A</td>
<td>301</td>
<td>SAH</td>
<td>C2-N3</td>
<td>3.68</td>
<td>1.38</td>
<td>1.32</td>
</tr>
<tr>
<td>2</td>
<td>E</td>
<td>301</td>
<td>SAH</td>
<td>C2-N3</td>
<td>3.72</td>
<td>1.38</td>
<td>1.32</td>
</tr>
<tr>
<td>2</td>
<td>C</td>
<td>301</td>
<td>SAH</td>
<td>C2-N3</td>
<td>3.75</td>
<td>1.38</td>
<td>1.32</td>
</tr>
<tr>
<td>2</td>
<td>O</td>
<td>301</td>
<td>SAH</td>
<td>C2-N3</td>
<td>3.79</td>
<td>1.38</td>
<td>1.32</td>
</tr>
<tr>
<td>2</td>
<td>K</td>
<td>301</td>
<td>SAH</td>
<td>C2-N3</td>
<td>3.79</td>
<td>1.38</td>
<td>1.32</td>
</tr>
<tr>
<td>2</td>
<td>G</td>
<td>301</td>
<td>SAH</td>
<td>C2-N3</td>
<td>3.83</td>
<td>1.38</td>
<td>1.32</td>
</tr>
<tr>
<td>2</td>
<td>R</td>
<td>301</td>
<td>SAH</td>
<td>C2-N3</td>
<td>3.83</td>
<td>1.38</td>
<td>1.32</td>
</tr>
<tr>
<td>2</td>
<td>N</td>
<td>301</td>
<td>SAH</td>
<td>C2-N3</td>
<td>3.86</td>
<td>1.38</td>
<td>1.32</td>
</tr>
<tr>
<td>2</td>
<td>L</td>
<td>301</td>
<td>SAH</td>
<td>C2-N3</td>
<td>3.87</td>
<td>1.38</td>
<td>1.32</td>
</tr>
<tr>
<td>2</td>
<td>J</td>
<td>301</td>
<td>SAH</td>
<td>C2-N3</td>
<td>3.88</td>
<td>1.38</td>
<td>1.32</td>
</tr>
<tr>
<td>2</td>
<td>P</td>
<td>301</td>
<td>SAH</td>
<td>C2-N3</td>
<td>3.90</td>
<td>1.38</td>
<td>1.32</td>
</tr>
<tr>
<td>2</td>
<td>M</td>
<td>301</td>
<td>SAH</td>
<td>C2-N3</td>
<td>3.91</td>
<td>1.38</td>
<td>1.32</td>
</tr>
<tr>
<td>2</td>
<td>D</td>
<td>301</td>
<td>SAH</td>
<td>C2-N3</td>
<td>3.91</td>
<td>1.38</td>
<td>1.32</td>
</tr>
<tr>
<td>2</td>
<td>H</td>
<td>301</td>
<td>SAH</td>
<td>C2-N3</td>
<td>3.97</td>
<td>1.38</td>
<td>1.32</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>302</td>
<td>SAH</td>
<td>C2-N3</td>
<td>3.99</td>
<td>1.38</td>
<td>1.32</td>
</tr>
<tr>
<td>2</td>
<td>F</td>
<td>301</td>
<td>SAH</td>
<td>C2-N3</td>
<td>4.00</td>
<td>1.38</td>
<td>1.32</td>
</tr>
</tbody>
</table>

All (42) bond angle outliers are listed below:

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
<th>Atoms</th>
<th>Z</th>
<th>Observed(°)</th>
<th>Ideal(°)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>C</td>
<td>301</td>
<td>SAH</td>
<td>N3-C2-N1</td>
<td>-10.80</td>
<td>119.62</td>
<td>128.86</td>
</tr>
<tr>
<td>2</td>
<td>I</td>
<td>301</td>
<td>SAH</td>
<td>N3-C2-N1</td>
<td>-10.64</td>
<td>119.76</td>
<td>128.86</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>301</td>
<td>SAH</td>
<td>N3-C2-N1</td>
<td>-10.62</td>
<td>119.77</td>
<td>128.86</td>
</tr>
<tr>
<td>2</td>
<td>A</td>
<td>301</td>
<td>SAH</td>
<td>N3-C2-N1</td>
<td>-10.56</td>
<td>119.82</td>
<td>128.86</td>
</tr>
<tr>
<td>2</td>
<td>K</td>
<td>301</td>
<td>SAH</td>
<td>N3-C2-N1</td>
<td>-10.48</td>
<td>119.90</td>
<td>128.86</td>
</tr>
<tr>
<td>2</td>
<td>N</td>
<td>301</td>
<td>SAH</td>
<td>N3-C2-N1</td>
<td>-10.44</td>
<td>119.93</td>
<td>128.86</td>
</tr>
<tr>
<td>2</td>
<td>E</td>
<td>301</td>
<td>SAH</td>
<td>N3-C2-N1</td>
<td>-10.43</td>
<td>119.94</td>
<td>128.86</td>
</tr>
<tr>
<td>2</td>
<td>R</td>
<td>301</td>
<td>SAH</td>
<td>N3-C2-N1</td>
<td>-10.42</td>
<td>119.94</td>
<td>128.86</td>
</tr>
<tr>
<td>2</td>
<td>Q</td>
<td>301</td>
<td>SAH</td>
<td>N3-C2-N1</td>
<td>-10.32</td>
<td>120.03</td>
<td>128.86</td>
</tr>
<tr>
<td>2</td>
<td>J</td>
<td>301</td>
<td>SAH</td>
<td>N3-C2-N1</td>
<td>-10.32</td>
<td>120.03</td>
<td>128.86</td>
</tr>
<tr>
<td>2</td>
<td>H</td>
<td>301</td>
<td>SAH</td>
<td>N3-C2-N1</td>
<td>-10.20</td>
<td>120.13</td>
<td>128.86</td>
</tr>
</tbody>
</table>

Continued on next page...
Continued from previous page...

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
<th>Atoms</th>
<th>Z</th>
<th>Observed(°)</th>
<th>Ideal(°)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>M</td>
<td>301</td>
<td>SAH</td>
<td>N3-C2-N1</td>
<td>-10.18</td>
<td>120.15</td>
<td>128.86</td>
</tr>
<tr>
<td>2</td>
<td>D</td>
<td>301</td>
<td>SAH</td>
<td>N3-C2-N1</td>
<td>-10.18</td>
<td>120.15</td>
<td>128.86</td>
</tr>
<tr>
<td>2</td>
<td>G</td>
<td>301</td>
<td>SAH</td>
<td>N3-C2-N1</td>
<td>-10.11</td>
<td>120.21</td>
<td>128.86</td>
</tr>
<tr>
<td>2</td>
<td>O</td>
<td>301</td>
<td>SAH</td>
<td>N3-C2-N1</td>
<td>-9.99</td>
<td>120.31</td>
<td>128.86</td>
</tr>
<tr>
<td>2</td>
<td>F</td>
<td>301</td>
<td>SAH</td>
<td>N3-C2-N1</td>
<td>-9.91</td>
<td>120.38</td>
<td>128.86</td>
</tr>
<tr>
<td>2</td>
<td>L</td>
<td>301</td>
<td>SAH</td>
<td>N3-C2-N1</td>
<td>-9.87</td>
<td>120.41</td>
<td>128.86</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>302</td>
<td>SAH</td>
<td>N3-C2-N1</td>
<td>-9.85</td>
<td>120.43</td>
<td>128.86</td>
</tr>
<tr>
<td>2</td>
<td>P</td>
<td>301</td>
<td>SAH</td>
<td>N3-C2-N1</td>
<td>-9.72</td>
<td>120.54</td>
<td>128.86</td>
</tr>
<tr>
<td>2</td>
<td>L</td>
<td>301</td>
<td>SAH</td>
<td>C5'-SD-CG</td>
<td>-4.34</td>
<td>89.25</td>
<td>102.27</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>301</td>
<td>SAH</td>
<td>C5'-SD-CG</td>
<td>-4.21</td>
<td>89.65</td>
<td>102.27</td>
</tr>
<tr>
<td>2</td>
<td>H</td>
<td>301</td>
<td>SAH</td>
<td>C5'-SD-CG</td>
<td>-4.19</td>
<td>89.69</td>
<td>102.27</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>302</td>
<td>SAH</td>
<td>C5'-SD-CG</td>
<td>-4.17</td>
<td>105.48</td>
<td>109.83</td>
</tr>
<tr>
<td>2</td>
<td>K</td>
<td>301</td>
<td>SAH</td>
<td>C5'-SD-CG</td>
<td>-4.13</td>
<td>89.88</td>
<td>102.27</td>
</tr>
<tr>
<td>2</td>
<td>D</td>
<td>301</td>
<td>SAH</td>
<td>C5'-SD-CG</td>
<td>-4.07</td>
<td>90.05</td>
<td>102.27</td>
</tr>
<tr>
<td>2</td>
<td>O</td>
<td>301</td>
<td>SAH</td>
<td>C5'-SD-CG</td>
<td>-4.00</td>
<td>90.28</td>
<td>102.27</td>
</tr>
<tr>
<td>2</td>
<td>C</td>
<td>301</td>
<td>SAH</td>
<td>C5'-SD-CG</td>
<td>-3.97</td>
<td>90.34</td>
<td>102.27</td>
</tr>
<tr>
<td>2</td>
<td>J</td>
<td>301</td>
<td>SAH</td>
<td>C5'-SD-CG</td>
<td>-3.95</td>
<td>90.42</td>
<td>102.27</td>
</tr>
<tr>
<td>2</td>
<td>R</td>
<td>301</td>
<td>SAH</td>
<td>C5'-SD-CG</td>
<td>-3.88</td>
<td>90.61</td>
<td>102.27</td>
</tr>
<tr>
<td>2</td>
<td>F</td>
<td>301</td>
<td>SAH</td>
<td>C5'-SD-CG</td>
<td>-3.88</td>
<td>90.62</td>
<td>102.27</td>
</tr>
<tr>
<td>2</td>
<td>G</td>
<td>301</td>
<td>SAH</td>
<td>C5'-SD-CG</td>
<td>-3.83</td>
<td>90.77</td>
<td>102.27</td>
</tr>
<tr>
<td>2</td>
<td>Q</td>
<td>301</td>
<td>SAH</td>
<td>C5'-SD-CG</td>
<td>-3.73</td>
<td>91.08</td>
<td>102.27</td>
</tr>
<tr>
<td>2</td>
<td>M</td>
<td>301</td>
<td>SAH</td>
<td>C5'-SD-CG</td>
<td>-3.69</td>
<td>91.18</td>
<td>102.27</td>
</tr>
<tr>
<td>2</td>
<td>N</td>
<td>301</td>
<td>SAH</td>
<td>C5'-SD-CG</td>
<td>-3.69</td>
<td>91.20</td>
<td>102.27</td>
</tr>
<tr>
<td>2</td>
<td>A</td>
<td>301</td>
<td>SAH</td>
<td>C5'-SD-CG</td>
<td>-3.55</td>
<td>91.61</td>
<td>102.27</td>
</tr>
<tr>
<td>2</td>
<td>P</td>
<td>301</td>
<td>SAH</td>
<td>C5'-SD-CG</td>
<td>-3.48</td>
<td>91.82</td>
<td>102.27</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>302</td>
<td>SAH</td>
<td>C5'-SD-CG</td>
<td>-3.38</td>
<td>92.11</td>
<td>102.27</td>
</tr>
<tr>
<td>2</td>
<td>E</td>
<td>301</td>
<td>SAH</td>
<td>C5'-SD-CG</td>
<td>-3.32</td>
<td>92.32</td>
<td>102.27</td>
</tr>
<tr>
<td>2</td>
<td>I</td>
<td>301</td>
<td>SAH</td>
<td>C5'-SD-CG</td>
<td>-2.89</td>
<td>93.60</td>
<td>102.27</td>
</tr>
<tr>
<td>2</td>
<td>F</td>
<td>301</td>
<td>SAH</td>
<td>C4-C5-N7</td>
<td>-2.70</td>
<td>106.80</td>
<td>109.41</td>
</tr>
<tr>
<td>2</td>
<td>H</td>
<td>301</td>
<td>SAH</td>
<td>C5'-C4'-C3'</td>
<td>-2.29</td>
<td>109.34</td>
<td>115.06</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>302</td>
<td>SAH</td>
<td>O4'-C4'-C5'</td>
<td>2.18</td>
<td>114.44</td>
<td>108.83</td>
</tr>
</tbody>
</table>

There are no chirality outliers.

There are no torsion outliers.

There are no ring outliers.

17 monomers are involved in 33 short contacts:

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
<th>Clashes</th>
<th>Symm-Clashes</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>A</td>
<td>301</td>
<td>SAH</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>301</td>
<td>SAH</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>302</td>
<td>SAH</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

Continued on next page...
Continued from previous page...

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
<th>Clashes</th>
<th>Symm-Clashes</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>C</td>
<td>301</td>
<td>SAH</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>D</td>
<td>301</td>
<td>SAH</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>E</td>
<td>301</td>
<td>SAH</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>F</td>
<td>301</td>
<td>SAH</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>G</td>
<td>301</td>
<td>SAH</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>H</td>
<td>301</td>
<td>SAH</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>J</td>
<td>301</td>
<td>SAH</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>K</td>
<td>301</td>
<td>SAH</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>L</td>
<td>301</td>
<td>SAH</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>M</td>
<td>301</td>
<td>SAH</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>N</td>
<td>301</td>
<td>SAH</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>O</td>
<td>301</td>
<td>SAH</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>P</td>
<td>301</td>
<td>SAH</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>R</td>
<td>301</td>
<td>SAH</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

5.7 Other polymers

There are no such residues in this entry.

5.8 Polymer linkage issues

There are no chain breaks in this entry.
6  Fit of model and data

6.1 Protein, DNA and RNA chains

In the following table, the column labelled ‘#RSRZ> 2’ contains the number (and percentage) of RSRZ outliers, followed by percent RSRZ outliers for the chain as percentile scores relative to all X-ray entries and entries of similar resolution. The OWAB column contains the minimum, median, 95th percentile and maximum values of the occupancy-weighted average B-factor per residue. The column labelled ‘Q< 0.9’ lists the number of (and percentage) of residues with an average occupancy less than 0.9.

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Analysed</th>
<th>&lt;RSRZ&gt;</th>
<th>#RSRZ&gt;2</th>
<th>OWAB(Å²)</th>
<th>Q&lt;0.9</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A</td>
<td>281/297 (94%)</td>
<td>0.16</td>
<td>1 (0%)</td>
<td>92</td>
<td>29, 46, 71, 105</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>280/297 (94%)</td>
<td>0.15</td>
<td>0</td>
<td>100</td>
<td>32, 49, 77, 95</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>280/297 (94%)</td>
<td>0.32</td>
<td>4 (1%)</td>
<td>75</td>
<td>38, 61, 87, 101</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>280/297 (94%)</td>
<td>0.19</td>
<td>3 (1%)</td>
<td>80</td>
<td>40, 61, 86, 101</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>279/297 (93%)</td>
<td>0.19</td>
<td>3 (1%)</td>
<td>80</td>
<td>30, 56, 77, 94</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>280/297 (94%)</td>
<td>0.19</td>
<td>2 (0%)</td>
<td>87</td>
<td>28, 49, 75, 102</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>280/297 (94%)</td>
<td>0.77</td>
<td>26 (9%)</td>
<td>8</td>
<td>53, 85, 122, 138</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>279/297 (93%)</td>
<td>1.05</td>
<td>47 (16%)</td>
<td>1</td>
<td>64, 99, 123, 137</td>
</tr>
<tr>
<td>1</td>
<td>I</td>
<td>280/297 (94%)</td>
<td>0.18</td>
<td>5 (1%)</td>
<td>68</td>
<td>25, 47, 96, 132</td>
</tr>
<tr>
<td>1</td>
<td>J</td>
<td>281/297 (94%)</td>
<td>0.54</td>
<td>17 (6%)</td>
<td>22</td>
<td>35, 85, 113, 133</td>
</tr>
<tr>
<td>1</td>
<td>K</td>
<td>281/297 (94%)</td>
<td>0.54</td>
<td>13 (4%)</td>
<td>32</td>
<td>46, 76, 117, 127</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>280/297 (94%)</td>
<td>0.70</td>
<td>24 (8%)</td>
<td>10</td>
<td>51, 88, 120, 147</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>281/297 (94%)</td>
<td>0.58</td>
<td>24 (8%)</td>
<td>11</td>
<td>40, 63, 141, 169</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>281/297 (94%)</td>
<td>1.42</td>
<td>76 (27%)</td>
<td>0</td>
<td>50, 107, 137, 152</td>
</tr>
<tr>
<td>1</td>
<td>O</td>
<td>280/297 (94%)</td>
<td>0.46</td>
<td>13 (4%)</td>
<td>32</td>
<td>36, 70, 100, 124</td>
</tr>
<tr>
<td>1</td>
<td>P</td>
<td>280/297 (94%)</td>
<td>0.48</td>
<td>17 (6%)</td>
<td>21</td>
<td>42, 78, 105, 116</td>
</tr>
<tr>
<td>1</td>
<td>Q</td>
<td>281/297 (94%)</td>
<td>1.11</td>
<td>53 (18%)</td>
<td>1</td>
<td>36, 77, 159, 191</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>281/297 (94%)</td>
<td>2.11</td>
<td>119 (42%)</td>
<td>0</td>
<td>73, 115, 149, 173</td>
</tr>
<tr>
<td>All</td>
<td>All</td>
<td>5045/5346 (94%)</td>
<td>0.62</td>
<td>447 (8%)</td>
<td>9</td>
<td>25, 70, 124, 191</td>
</tr>
</tbody>
</table>

All (447) RSRZ outliers are listed below:

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
<th>RSRZ</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Q</td>
<td>11</td>
<td>GLN</td>
<td>19.2</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>9</td>
<td>GLN</td>
<td>11.9</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>250</td>
<td>PHE</td>
<td>8.8</td>
</tr>
<tr>
<td>Mol</td>
<td>Chain</td>
<td>Res</td>
<td>Type</td>
<td>RSRZ</td>
</tr>
<tr>
<td>-----</td>
<td>-------</td>
<td>-----</td>
<td>------</td>
<td>------</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>17</td>
<td>VAL</td>
<td>8.5</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>243</td>
<td>VAL</td>
<td>8.3</td>
</tr>
<tr>
<td>1</td>
<td>Q</td>
<td>25</td>
<td>GLY</td>
<td>8.2</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>21</td>
<td>TYR</td>
<td>8.1</td>
</tr>
<tr>
<td>1</td>
<td>Q</td>
<td>20</td>
<td>TRP</td>
<td>8.0</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>179</td>
<td>VAL</td>
<td>7.6</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>239</td>
<td>PHE</td>
<td>7.5</td>
</tr>
<tr>
<td>1</td>
<td>K</td>
<td>21</td>
<td>TYR</td>
<td>7.5</td>
</tr>
<tr>
<td>1</td>
<td>Q</td>
<td>27</td>
<td>VAL</td>
<td>7.5</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>82</td>
<td>LEU</td>
<td>7.4</td>
</tr>
<tr>
<td>1</td>
<td>Q</td>
<td>9</td>
<td>GLN</td>
<td>7.4</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>134</td>
<td>ALA</td>
<td>7.4</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>15</td>
<td>ASP</td>
<td>7.3</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>55</td>
<td>VAL</td>
<td>7.2</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>25</td>
<td>GLY</td>
<td>6.8</td>
</tr>
<tr>
<td>1</td>
<td>Q</td>
<td>15</td>
<td>ASP</td>
<td>6.7</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>10</td>
<td>GLN</td>
<td>6.7</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>211</td>
<td>PHE</td>
<td>6.4</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>260</td>
<td>ASP</td>
<td>6.3</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>204</td>
<td>VAL</td>
<td>6.3</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>104</td>
<td>THR</td>
<td>6.3</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>106</td>
<td>VAL</td>
<td>6.2</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>164</td>
<td>LEU</td>
<td>6.1</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>160</td>
<td>ARG</td>
<td>6.0</td>
</tr>
<tr>
<td>1</td>
<td>K</td>
<td>17</td>
<td>VAL</td>
<td>5.9</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>208</td>
<td>LEU</td>
<td>5.9</td>
</tr>
<tr>
<td>1</td>
<td>Q</td>
<td>12</td>
<td>VAL</td>
<td>5.8</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>125</td>
<td>LEU</td>
<td>5.8</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>149</td>
<td>ALA</td>
<td>5.8</td>
</tr>
<tr>
<td>1</td>
<td>Q</td>
<td>17</td>
<td>VAL</td>
<td>5.7</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>207</td>
<td>ARG</td>
<td>5.7</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>131</td>
<td>PHE</td>
<td>5.7</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>200</td>
<td>TYR</td>
<td>5.6</td>
</tr>
<tr>
<td>1</td>
<td>Q</td>
<td>30</td>
<td>LEU</td>
<td>5.5</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>148</td>
<td>CYS</td>
<td>5.5</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>196</td>
<td>PHE</td>
<td>5.4</td>
</tr>
<tr>
<td>1</td>
<td>Q</td>
<td>253</td>
<td>ARG</td>
<td>5.4</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>19</td>
<td>ASP</td>
<td>5.3</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>131</td>
<td>PHE</td>
<td>5.3</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>181</td>
<td>GLU</td>
<td>5.3</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>175</td>
<td>GLY</td>
<td>5.2</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>196</td>
<td>PHE</td>
<td>5.2</td>
</tr>
</tbody>
</table>

Continued on next page...
Continued from previous page...

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
<th>RSRZ</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>R</td>
<td>108</td>
<td>VAL</td>
<td>5.1</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>146</td>
<td>PHE</td>
<td>5.1</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>21</td>
<td>TYR</td>
<td>5.0</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>66</td>
<td>THR</td>
<td>5.0</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>121</td>
<td>ALA</td>
<td>5.0</td>
</tr>
<tr>
<td>1</td>
<td>Q</td>
<td>37</td>
<td>HIS</td>
<td>4.9</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>104</td>
<td>THR</td>
<td>4.9</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>252</td>
<td>GLU</td>
<td>4.8</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>200</td>
<td>TYR</td>
<td>4.8</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>258</td>
<td>PHE</td>
<td>4.8</td>
</tr>
<tr>
<td>1</td>
<td>O</td>
<td>289</td>
<td>VAL</td>
<td>4.8</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>205</td>
<td>PRO</td>
<td>4.7</td>
</tr>
<tr>
<td>1</td>
<td>Q</td>
<td>21</td>
<td>TYR</td>
<td>4.7</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>133</td>
<td>VAL</td>
<td>4.7</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>112</td>
<td>GLN</td>
<td>4.7</td>
</tr>
<tr>
<td>1</td>
<td>Q</td>
<td>32</td>
<td>LEU</td>
<td>4.6</td>
</tr>
<tr>
<td>1</td>
<td>Q</td>
<td>254</td>
<td>PHE</td>
<td>4.6</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>28</td>
<td>TYR</td>
<td>4.5</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>73</td>
<td>LEU</td>
<td>4.5</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>250</td>
<td>PHE</td>
<td>4.4</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>272</td>
<td>THR</td>
<td>4.3</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>84</td>
<td>ILE</td>
<td>4.3</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>212</td>
<td>PHE</td>
<td>4.3</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>150</td>
<td>TRP</td>
<td>4.2</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>266</td>
<td>LEU</td>
<td>4.2</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>49</td>
<td>PRO</td>
<td>4.2</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>199</td>
<td>LEU</td>
<td>4.2</td>
</tr>
<tr>
<td>1</td>
<td>Q</td>
<td>29</td>
<td>HIS</td>
<td>4.2</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>95</td>
<td>ALA</td>
<td>4.2</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>42</td>
<td>PHE</td>
<td>4.2</td>
</tr>
<tr>
<td>1</td>
<td>Q</td>
<td>36</td>
<td>VAL</td>
<td>4.2</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>125</td>
<td>LEU</td>
<td>4.2</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>101</td>
<td>ILE</td>
<td>4.1</td>
</tr>
<tr>
<td>1</td>
<td>J</td>
<td>138</td>
<td>ARG</td>
<td>4.1</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>250</td>
<td>PHE</td>
<td>4.1</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>171</td>
<td>LEU</td>
<td>4.1</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>11</td>
<td>GLN</td>
<td>4.1</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>155</td>
<td>LEU</td>
<td>4.0</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>250</td>
<td>PHE</td>
<td>4.0</td>
</tr>
<tr>
<td>1</td>
<td>Q</td>
<td>24</td>
<td>PHE</td>
<td>4.0</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>153</td>
<td>GLU</td>
<td>4.0</td>
</tr>
<tr>
<td>1</td>
<td>Q</td>
<td>270[A]</td>
<td>GLN</td>
<td>4.0</td>
</tr>
</tbody>
</table>
Continued from previous page...

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
<th>RSRZ</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Q</td>
<td>188</td>
<td>LEU</td>
<td>4.0</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>129</td>
<td>LEU</td>
<td>3.9</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>139</td>
<td>LEU</td>
<td>3.9</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>88</td>
<td>THR</td>
<td>3.9</td>
</tr>
<tr>
<td>1</td>
<td>J</td>
<td>105</td>
<td>GLY</td>
<td>3.9</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>247</td>
<td>ARG</td>
<td>3.9</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>131</td>
<td>PHE</td>
<td>3.9</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>20</td>
<td>TRP</td>
<td>3.9</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>190</td>
<td>GLU</td>
<td>3.9</td>
</tr>
<tr>
<td>1</td>
<td>O</td>
<td>218</td>
<td>ALA</td>
<td>3.8</td>
</tr>
<tr>
<td>1</td>
<td>Q</td>
<td>28</td>
<td>TYR</td>
<td>3.8</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>239</td>
<td>PHE</td>
<td>3.8</td>
</tr>
<tr>
<td>1</td>
<td>Q</td>
<td>19</td>
<td>ASP</td>
<td>3.8</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>241</td>
<td>LEU</td>
<td>3.8</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>196</td>
<td>PHE</td>
<td>3.8</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>75</td>
<td>PRO</td>
<td>3.8</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>110</td>
<td>LYS</td>
<td>3.8</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>289</td>
<td>VAL</td>
<td>3.8</td>
</tr>
<tr>
<td>1</td>
<td>P</td>
<td>139</td>
<td>LEU</td>
<td>3.8</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>236</td>
<td>MET</td>
<td>3.7</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>138</td>
<td>ARG</td>
<td>3.7</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>246</td>
<td>ARG</td>
<td>3.7</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>204</td>
<td>VAL</td>
<td>3.7</td>
</tr>
<tr>
<td>1</td>
<td>Q</td>
<td>13</td>
<td>THR</td>
<td>3.7</td>
</tr>
<tr>
<td>1</td>
<td>Q</td>
<td>52[A]</td>
<td>MET</td>
<td>3.7</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>20</td>
<td>TRP</td>
<td>3.7</td>
</tr>
<tr>
<td>1</td>
<td>Q</td>
<td>10</td>
<td>GLN</td>
<td>3.7</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>199</td>
<td>LEU</td>
<td>3.7</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>259</td>
<td>VAL</td>
<td>3.7</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>212</td>
<td>PHE</td>
<td>3.6</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>151</td>
<td>ALA</td>
<td>3.6</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>197</td>
<td>GLU</td>
<td>3.6</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>140</td>
<td>PRO</td>
<td>3.6</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>17</td>
<td>VAL</td>
<td>3.6</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>270[A]</td>
<td>GLN</td>
<td>3.6</td>
</tr>
<tr>
<td>1</td>
<td>Q</td>
<td>258</td>
<td>PHE</td>
<td>3.6</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>139</td>
<td>LEU</td>
<td>3.6</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>70</td>
<td>ILE</td>
<td>3.5</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>177</td>
<td>LEU</td>
<td>3.5</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>105</td>
<td>GLY</td>
<td>3.5</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>262</td>
<td>LEU</td>
<td>3.5</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>128</td>
<td>ARG</td>
<td>3.5</td>
</tr>
</tbody>
</table>

Continued on next page...
Continued from previous page:

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
<th>RSRZ</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>R</td>
<td>147</td>
<td>ASP</td>
<td>3.5</td>
</tr>
<tr>
<td>1</td>
<td>Q</td>
<td>186</td>
<td>GLU</td>
<td>3.5</td>
</tr>
<tr>
<td>1</td>
<td>O</td>
<td>211</td>
<td>PHE</td>
<td>3.5</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>164</td>
<td>LEU</td>
<td>3.5</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>232</td>
<td>LEU</td>
<td>3.5</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>186</td>
<td>GLU</td>
<td>3.5</td>
</tr>
<tr>
<td>1</td>
<td>Q</td>
<td>275</td>
<td>ARG</td>
<td>3.5</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>146</td>
<td>PHE</td>
<td>3.5</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>119</td>
<td>LEU</td>
<td>3.5</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>289</td>
<td>VAL</td>
<td>3.5</td>
</tr>
<tr>
<td>1</td>
<td>Q</td>
<td>31</td>
<td>THR</td>
<td>3.4</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>261</td>
<td>GLY</td>
<td>3.4</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>138</td>
<td>ARG</td>
<td>3.4</td>
</tr>
<tr>
<td>1</td>
<td>J</td>
<td>188</td>
<td>LEU</td>
<td>3.4</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>25</td>
<td>GLY</td>
<td>3.4</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>188</td>
<td>LEU</td>
<td>3.4</td>
</tr>
<tr>
<td>1</td>
<td>Q</td>
<td>33</td>
<td>GLY</td>
<td>3.4</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>220</td>
<td>PHE</td>
<td>3.4</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>244</td>
<td>TYR</td>
<td>3.4</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>116</td>
<td>ALA</td>
<td>3.4</td>
</tr>
<tr>
<td>1</td>
<td>I</td>
<td>10</td>
<td>GLN</td>
<td>3.3</td>
</tr>
<tr>
<td>1</td>
<td>Q</td>
<td>212</td>
<td>PHE</td>
<td>3.3</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>265</td>
<td>GLY</td>
<td>3.3</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>129</td>
<td>LEU</td>
<td>3.3</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>254</td>
<td>PHE</td>
<td>3.3</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>126</td>
<td>THR</td>
<td>3.3</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>161</td>
<td>ALA</td>
<td>3.3</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>196</td>
<td>PHE</td>
<td>3.3</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>141</td>
<td>TYR</td>
<td>3.3</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>195</td>
<td>LEU</td>
<td>3.3</td>
</tr>
<tr>
<td>1</td>
<td>Q</td>
<td>199</td>
<td>LEU</td>
<td>3.3</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>168</td>
<td>TRP</td>
<td>3.3</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>262</td>
<td>LEU</td>
<td>3.2</td>
</tr>
<tr>
<td>1</td>
<td>Q</td>
<td>211</td>
<td>PHE</td>
<td>3.2</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>266</td>
<td>LEU</td>
<td>3.2</td>
</tr>
<tr>
<td>1</td>
<td>I</td>
<td>15</td>
<td>ASP</td>
<td>3.2</td>
</tr>
<tr>
<td>1</td>
<td>J</td>
<td>129</td>
<td>LEU</td>
<td>3.2</td>
</tr>
<tr>
<td>1</td>
<td>Q</td>
<td>23</td>
<td>LYS</td>
<td>3.2</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>149</td>
<td>ALA</td>
<td>3.2</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>130</td>
<td>THR</td>
<td>3.2</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>106</td>
<td>VAL</td>
<td>3.2</td>
</tr>
</tbody>
</table>

Continued on next page...
Continued from previous page...

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
<th>RSRZ</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>R</td>
<td>85</td>
<td>GLY</td>
<td>3.2</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>289</td>
<td>VAL</td>
<td>3.2</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>69</td>
<td>LEU</td>
<td>3.2</td>
</tr>
<tr>
<td>1</td>
<td>Q</td>
<td>243</td>
<td>VAL</td>
<td>3.2</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>275</td>
<td>ARG</td>
<td>3.2</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>279</td>
<td>PHE</td>
<td>3.1</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>240</td>
<td>ALA</td>
<td>3.1</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>57</td>
<td>MET</td>
<td>3.1</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>86</td>
<td>CYS</td>
<td>3.1</td>
</tr>
<tr>
<td>1</td>
<td>K</td>
<td>212</td>
<td>PHE</td>
<td>3.1</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>101</td>
<td>ILE</td>
<td>3.1</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>157</td>
<td>HIS</td>
<td>3.1</td>
</tr>
<tr>
<td>1</td>
<td>K</td>
<td>26</td>
<td>GLU</td>
<td>3.1</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>195</td>
<td>LEU</td>
<td>3.1</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>171</td>
<td>LEU</td>
<td>3.1</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>256</td>
<td>ALA</td>
<td>3.1</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>103</td>
<td>VAL</td>
<td>3.1</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>36</td>
<td>VAL</td>
<td>3.1</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>188</td>
<td>LEU</td>
<td>3.0</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>252</td>
<td>GLU</td>
<td>3.0</td>
</tr>
<tr>
<td>1</td>
<td>O</td>
<td>161</td>
<td>ALA</td>
<td>3.0</td>
</tr>
<tr>
<td>1</td>
<td>Q</td>
<td>14</td>
<td>ALA</td>
<td>3.0</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>54</td>
<td>LEU</td>
<td>3.0</td>
</tr>
<tr>
<td>1</td>
<td>J</td>
<td>187</td>
<td>GLU</td>
<td>3.0</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>106</td>
<td>VAL</td>
<td>3.0</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>184</td>
<td>VAL</td>
<td>3.0</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>270</td>
<td>GLN</td>
<td>3.0</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>274</td>
<td>ILE</td>
<td>3.0</td>
</tr>
<tr>
<td>1</td>
<td>O</td>
<td>137</td>
<td>MET</td>
<td>3.0</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>290</td>
<td>LEU</td>
<td>3.0</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>119</td>
<td>LEU</td>
<td>3.0</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>274</td>
<td>ILE</td>
<td>3.0</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>102</td>
<td>ALA</td>
<td>3.0</td>
</tr>
<tr>
<td>1</td>
<td>J</td>
<td>212</td>
<td>PHE</td>
<td>3.0</td>
</tr>
<tr>
<td>1</td>
<td>A</td>
<td>9</td>
<td>GLN</td>
<td>3.0</td>
</tr>
<tr>
<td>1</td>
<td>J</td>
<td>164</td>
<td>LEU</td>
<td>3.0</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>192</td>
<td>GLU</td>
<td>3.0</td>
</tr>
<tr>
<td>1</td>
<td>Q</td>
<td>242</td>
<td>GLY</td>
<td>3.0</td>
</tr>
<tr>
<td>1</td>
<td>Q</td>
<td>262</td>
<td>LEU</td>
<td>2.9</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>96</td>
<td>ALA</td>
<td>2.9</td>
</tr>
<tr>
<td>1</td>
<td>Q</td>
<td>200</td>
<td>TYR</td>
<td>2.9</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>81</td>
<td>LEU</td>
<td>2.9</td>
</tr>
</tbody>
</table>

Continued on next page...
Continued from previous page...

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
<th>RSRZ</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>M</td>
<td>12</td>
<td>VAL</td>
<td>2.9</td>
</tr>
<tr>
<td>1</td>
<td>Q</td>
<td>57</td>
<td>MET</td>
<td>2.9</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>182</td>
<td>SER</td>
<td>2.9</td>
</tr>
<tr>
<td>1</td>
<td>O</td>
<td>138</td>
<td>ARG</td>
<td>2.9</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>121</td>
<td>ALA</td>
<td>2.9</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>30</td>
<td>LEU</td>
<td>2.9</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>141</td>
<td>TYR</td>
<td>2.9</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>110</td>
<td>LYS</td>
<td>2.9</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>132</td>
<td>GLU</td>
<td>2.9</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>244</td>
<td>TYR</td>
<td>2.9</td>
</tr>
<tr>
<td>1</td>
<td>O</td>
<td>21</td>
<td>TYR</td>
<td>2.9</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>289</td>
<td>VAL</td>
<td>2.8</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>247</td>
<td>ARG</td>
<td>2.8</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>50</td>
<td>GLN</td>
<td>2.8</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>126</td>
<td>THR</td>
<td>2.8</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>136</td>
<td>ALA</td>
<td>2.8</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>225</td>
<td>LEU</td>
<td>2.8</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>137</td>
<td>MET</td>
<td>2.8</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>101</td>
<td>ILE</td>
<td>2.8</td>
</tr>
<tr>
<td>1</td>
<td>K</td>
<td>12</td>
<td>VAL</td>
<td>2.8</td>
</tr>
<tr>
<td>1</td>
<td>P</td>
<td>196</td>
<td>PHE</td>
<td>2.8</td>
</tr>
<tr>
<td>1</td>
<td>Q</td>
<td>196</td>
<td>PHE</td>
<td>2.8</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>279</td>
<td>PHE</td>
<td>2.8</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>242</td>
<td>GLY</td>
<td>2.8</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>179</td>
<td>VAL</td>
<td>2.8</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>103</td>
<td>VAL</td>
<td>2.8</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>200</td>
<td>TYR</td>
<td>2.8</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>262</td>
<td>LEU</td>
<td>2.8</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>135</td>
<td>ASP</td>
<td>2.8</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>243</td>
<td>VAL</td>
<td>2.7</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>174</td>
<td>GLY</td>
<td>2.7</td>
</tr>
<tr>
<td>1</td>
<td>O</td>
<td>165</td>
<td>GLY</td>
<td>2.7</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>253</td>
<td>ARG</td>
<td>2.7</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>108</td>
<td>VAL</td>
<td>2.7</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>134</td>
<td>ALA</td>
<td>2.7</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>223</td>
<td>LEU</td>
<td>2.7</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>36</td>
<td>VAL</td>
<td>2.7</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>240</td>
<td>ALA</td>
<td>2.7</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>198</td>
<td>THR</td>
<td>2.7</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>266</td>
<td>LEU</td>
<td>2.7</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>82</td>
<td>LEU</td>
<td>2.7</td>
</tr>
<tr>
<td>1</td>
<td>K</td>
<td>25</td>
<td>GLY</td>
<td>2.7</td>
</tr>
</tbody>
</table>

Continued on next page...
Continued from previous page...

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
<th>RSRZ</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>R</td>
<td>156</td>
<td>CYS</td>
<td>2.7</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>30</td>
<td>LEU</td>
<td>2.7</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>236</td>
<td>MET</td>
<td>2.7</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>260</td>
<td>ASP</td>
<td>2.7</td>
</tr>
<tr>
<td>1</td>
<td>Q</td>
<td>239</td>
<td>PHE</td>
<td>2.7</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>131</td>
<td>PHE</td>
<td>2.7</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>284</td>
<td>LEU</td>
<td>2.7</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>244</td>
<td>TYR</td>
<td>2.7</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>212</td>
<td>PHE</td>
<td>2.6</td>
</tr>
<tr>
<td>1</td>
<td>P</td>
<td>212</td>
<td>PHE</td>
<td>2.6</td>
</tr>
<tr>
<td>1</td>
<td>K</td>
<td>138</td>
<td>ARG</td>
<td>2.6</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>138</td>
<td>ARG</td>
<td>2.6</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>32</td>
<td>LEU</td>
<td>2.6</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>125</td>
<td>LEU</td>
<td>2.6</td>
</tr>
<tr>
<td>1</td>
<td>P</td>
<td>119</td>
<td>LEU</td>
<td>2.6</td>
</tr>
<tr>
<td>1</td>
<td>Q</td>
<td>241</td>
<td>LEU</td>
<td>2.6</td>
</tr>
<tr>
<td>1</td>
<td>K</td>
<td>190</td>
<td>GLU</td>
<td>2.6</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>275</td>
<td>ARG</td>
<td>2.6</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>150</td>
<td>TRP</td>
<td>2.6</td>
</tr>
<tr>
<td>1</td>
<td>Q</td>
<td>42</td>
<td>PHE</td>
<td>2.6</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>38</td>
<td>CYS</td>
<td>2.6</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>123</td>
<td>HIS</td>
<td>2.6</td>
</tr>
<tr>
<td>1</td>
<td>I</td>
<td>25</td>
<td>GLY</td>
<td>2.6</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>194</td>
<td>ALA</td>
<td>2.6</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>28</td>
<td>TYR</td>
<td>2.6</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>151</td>
<td>ALA</td>
<td>2.6</td>
</tr>
<tr>
<td>1</td>
<td>P</td>
<td>106</td>
<td>VAL</td>
<td>2.6</td>
</tr>
<tr>
<td>1</td>
<td>P</td>
<td>204</td>
<td>VAL</td>
<td>2.6</td>
</tr>
<tr>
<td>1</td>
<td>Q</td>
<td>277</td>
<td>THR</td>
<td>2.6</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>247</td>
<td>ARG</td>
<td>2.6</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>14</td>
<td>ALA</td>
<td>2.5</td>
</tr>
<tr>
<td>1</td>
<td>P</td>
<td>250</td>
<td>PHE</td>
<td>2.5</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>210</td>
<td>GLU</td>
<td>2.5</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>200</td>
<td>TYR</td>
<td>2.5</td>
</tr>
<tr>
<td>1</td>
<td>I</td>
<td>21</td>
<td>TYR</td>
<td>2.5</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>138</td>
<td>ARG</td>
<td>2.5</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>97</td>
<td>ARG</td>
<td>2.5</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>142</td>
<td>GLU</td>
<td>2.5</td>
</tr>
<tr>
<td>1</td>
<td>O</td>
<td>212</td>
<td>PHE</td>
<td>2.5</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>81</td>
<td>LEU</td>
<td>2.5</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>202</td>
<td>ALA</td>
<td>2.5</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>107</td>
<td>ALA</td>
<td>2.5</td>
</tr>
</tbody>
</table>

Continued on next page...
### Continued from previous page...

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
<th>RSRZ</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>L</td>
<td>273</td>
<td>LEU</td>
<td>2.5</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>184</td>
<td>VAL</td>
<td>2.5</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>191</td>
<td>PRO</td>
<td>2.5</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>244</td>
<td>TYR</td>
<td>2.5</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>263</td>
<td>LEU</td>
<td>2.5</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>190</td>
<td>GLU</td>
<td>2.5</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>13</td>
<td>THR</td>
<td>2.5</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>107</td>
<td>ALA</td>
<td>2.5</td>
</tr>
<tr>
<td>1</td>
<td>J</td>
<td>199</td>
<td>LEU</td>
<td>2.5</td>
</tr>
<tr>
<td>1</td>
<td>P</td>
<td>103</td>
<td>VAL</td>
<td>2.4</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>20</td>
<td>TRP</td>
<td>2.4</td>
</tr>
<tr>
<td>1</td>
<td>Q</td>
<td>22</td>
<td>ASP</td>
<td>2.4</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>195</td>
<td>LEU</td>
<td>2.4</td>
</tr>
<tr>
<td>1</td>
<td>Q</td>
<td>263</td>
<td>LEU</td>
<td>2.4</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>136</td>
<td>ALA</td>
<td>2.4</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>120</td>
<td>ALA</td>
<td>2.4</td>
</tr>
<tr>
<td>1</td>
<td>Q</td>
<td>40</td>
<td>LEU</td>
<td>2.4</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>178</td>
<td>LEU</td>
<td>2.4</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>289</td>
<td>VAL</td>
<td>2.4</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>112</td>
<td>GLN</td>
<td>2.4</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>137</td>
<td>MET</td>
<td>2.4</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>107</td>
<td>ALA</td>
<td>2.4</td>
</tr>
<tr>
<td>1</td>
<td>P</td>
<td>116</td>
<td>ALA</td>
<td>2.4</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>154</td>
<td>SER</td>
<td>2.4</td>
</tr>
<tr>
<td>1</td>
<td>J</td>
<td>110</td>
<td>LYS</td>
<td>2.4</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>23</td>
<td>LYS</td>
<td>2.4</td>
</tr>
<tr>
<td>1</td>
<td>K</td>
<td>23</td>
<td>LYS</td>
<td>2.4</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>110</td>
<td>LYS</td>
<td>2.4</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>162</td>
<td>LYS</td>
<td>2.4</td>
</tr>
<tr>
<td>1</td>
<td>P</td>
<td>155</td>
<td>LEU</td>
<td>2.4</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>100</td>
<td>GLY</td>
<td>2.4</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>221</td>
<td>HIS</td>
<td>2.4</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>198</td>
<td>THR</td>
<td>2.4</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>284</td>
<td>LEU</td>
<td>2.4</td>
</tr>
<tr>
<td>1</td>
<td>P</td>
<td>81</td>
<td>LEU</td>
<td>2.4</td>
</tr>
<tr>
<td>1</td>
<td>J</td>
<td>108</td>
<td>VAL</td>
<td>2.4</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>80</td>
<td>HIS</td>
<td>2.4</td>
</tr>
<tr>
<td>1</td>
<td>K</td>
<td>19</td>
<td>ASP</td>
<td>2.4</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>88</td>
<td>THR</td>
<td>2.4</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>156</td>
<td>CYS</td>
<td>2.4</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>52</td>
<td>MET</td>
<td>2.3</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>170</td>
<td>VAL</td>
<td>2.3</td>
</tr>
</tbody>
</table>

*Continued on next page...*
Continued from previous page...

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
<th>RSRZ</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>R</td>
<td>159</td>
<td>ASP</td>
<td>2.3</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>161</td>
<td>ALA</td>
<td>2.3</td>
</tr>
<tr>
<td>1</td>
<td>J</td>
<td>179</td>
<td>VAL</td>
<td>2.3</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>183</td>
<td>VAL</td>
<td>2.3</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>254</td>
<td>PHE</td>
<td>2.3</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>258</td>
<td>PHE</td>
<td>2.3</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>280</td>
<td>PHE</td>
<td>2.3</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>134</td>
<td>ALA</td>
<td>2.3</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>65</td>
<td>TYR</td>
<td>2.3</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>132</td>
<td>GLU</td>
<td>2.3</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>14</td>
<td>ALA</td>
<td>2.3</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>216</td>
<td>SER</td>
<td>2.3</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>75</td>
<td>PRO</td>
<td>2.3</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>138</td>
<td>ARG</td>
<td>2.3</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>265</td>
<td>GLY</td>
<td>2.3</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>240</td>
<td>ALA</td>
<td>2.3</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>62</td>
<td>GLN</td>
<td>2.3</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>127</td>
<td>GLU</td>
<td>2.3</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>187</td>
<td>GLU</td>
<td>2.3</td>
</tr>
<tr>
<td>1</td>
<td>P</td>
<td>289</td>
<td>VAL</td>
<td>2.3</td>
</tr>
<tr>
<td>1</td>
<td>Q</td>
<td>289</td>
<td>VAL</td>
<td>2.3</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>145</td>
<td>SER</td>
<td>2.3</td>
</tr>
<tr>
<td>1</td>
<td>O</td>
<td>202</td>
<td>ALA</td>
<td>2.3</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>261</td>
<td>GLY</td>
<td>2.2</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>133</td>
<td>VAL</td>
<td>2.2</td>
</tr>
<tr>
<td>1</td>
<td>J</td>
<td>239</td>
<td>PHE</td>
<td>2.2</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>146</td>
<td>PHE</td>
<td>2.2</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>188</td>
<td>LEU</td>
<td>2.2</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>118</td>
<td>ARG</td>
<td>2.2</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>17</td>
<td>VAL</td>
<td>2.2</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>243</td>
<td>VAL</td>
<td>2.2</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>142</td>
<td>GLU</td>
<td>2.2</td>
</tr>
<tr>
<td>1</td>
<td>P</td>
<td>131</td>
<td>PHE</td>
<td>2.2</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>129</td>
<td>LEU</td>
<td>2.2</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>68</td>
<td>TYR</td>
<td>2.2</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>255</td>
<td>GLY</td>
<td>2.2</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>51</td>
<td>ASP</td>
<td>2.2</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>179</td>
<td>VAL</td>
<td>2.2</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>133</td>
<td>VAL</td>
<td>2.2</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>256</td>
<td>ALA</td>
<td>2.2</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>255</td>
<td>GLY</td>
<td>2.2</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>87</td>
<td>GLY</td>
<td>2.2</td>
</tr>
</tbody>
</table>

Continued on next page...
Continued from previous page...

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
<th>RSRZ</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>O</td>
<td>207</td>
<td>ARG</td>
<td>2.2</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>133</td>
<td>VAL</td>
<td>2.2</td>
</tr>
<tr>
<td>1</td>
<td>I</td>
<td>14</td>
<td>ALA</td>
<td>2.2</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>239</td>
<td>PHE</td>
<td>2.2</td>
</tr>
<tr>
<td>1</td>
<td>J</td>
<td>131</td>
<td>PHE</td>
<td>2.2</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>112</td>
<td>GLN</td>
<td>2.2</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>30</td>
<td>LEU</td>
<td>2.2</td>
</tr>
<tr>
<td>1</td>
<td>E</td>
<td>106</td>
<td>VAL</td>
<td>2.2</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>130</td>
<td>THR</td>
<td>2.2</td>
</tr>
<tr>
<td>1</td>
<td>K</td>
<td>24</td>
<td>PHE</td>
<td>2.2</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>139</td>
<td>LEU</td>
<td>2.2</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>127</td>
<td>GLU</td>
<td>2.2</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>123</td>
<td>HIS</td>
<td>2.2</td>
</tr>
<tr>
<td>1</td>
<td>Q</td>
<td>41</td>
<td>TRP</td>
<td>2.2</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>11</td>
<td>GLN</td>
<td>2.2</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>128</td>
<td>ARG</td>
<td>2.2</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>24</td>
<td>PHE</td>
<td>2.2</td>
</tr>
<tr>
<td>1</td>
<td>Q</td>
<td>54</td>
<td>LEU</td>
<td>2.2</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>9</td>
<td>GLN</td>
<td>2.1</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>168</td>
<td>TRP</td>
<td>2.1</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>13</td>
<td>THR</td>
<td>2.1</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>181</td>
<td>GLU</td>
<td>2.1</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>273</td>
<td>LEU</td>
<td>2.1</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>82</td>
<td>LEU</td>
<td>2.1</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>262</td>
<td>LEU</td>
<td>2.1</td>
</tr>
<tr>
<td>1</td>
<td>O</td>
<td>164</td>
<td>LEU</td>
<td>2.1</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>154</td>
<td>SER</td>
<td>2.1</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>253</td>
<td>ARG</td>
<td>2.1</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>104</td>
<td>THR</td>
<td>2.1</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>93</td>
<td>LEU</td>
<td>2.1</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>118</td>
<td>ARG</td>
<td>2.1</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>197</td>
<td>GLU</td>
<td>2.1</td>
</tr>
<tr>
<td>1</td>
<td>J</td>
<td>139</td>
<td>LEU</td>
<td>2.1</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>289</td>
<td>VAL</td>
<td>2.1</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>107</td>
<td>ALA</td>
<td>2.1</td>
</tr>
<tr>
<td>1</td>
<td>P</td>
<td>12</td>
<td>VAL</td>
<td>2.1</td>
</tr>
<tr>
<td>1</td>
<td>K</td>
<td>273</td>
<td>LEU</td>
<td>2.1</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>239</td>
<td>PHE</td>
<td>2.1</td>
</tr>
<tr>
<td>1</td>
<td>O</td>
<td>163</td>
<td>ALA</td>
<td>2.1</td>
</tr>
<tr>
<td>1</td>
<td>M</td>
<td>26</td>
<td>GLU</td>
<td>2.1</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>199</td>
<td>LEU</td>
<td>2.1</td>
</tr>
<tr>
<td>1</td>
<td>P</td>
<td>174</td>
<td>GLY</td>
<td>2.1</td>
</tr>
</tbody>
</table>

Continued on next page...
Continued from previous page...

<table>
<thead>
<tr>
<th>Mol</th>
<th>Chain</th>
<th>Res</th>
<th>Type</th>
<th>RSRZ</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>G</td>
<td>192</td>
<td>GLU</td>
<td>2.1</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>118</td>
<td>ARG</td>
<td>2.1</td>
</tr>
<tr>
<td>1</td>
<td>P</td>
<td>141</td>
<td>TYR</td>
<td>2.1</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>51</td>
<td>ASP</td>
<td>2.1</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>266</td>
<td>LEU</td>
<td>2.1</td>
</tr>
<tr>
<td>1</td>
<td>L</td>
<td>266</td>
<td>LEU</td>
<td>2.1</td>
</tr>
<tr>
<td>1</td>
<td>Q</td>
<td>208</td>
<td>LEU</td>
<td>2.1</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>137</td>
<td>MET</td>
<td>2.0</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>86</td>
<td>CYS</td>
<td>2.0</td>
</tr>
<tr>
<td>1</td>
<td>J</td>
<td>201</td>
<td>ALA</td>
<td>2.0</td>
</tr>
<tr>
<td>1</td>
<td>P</td>
<td>140</td>
<td>PRO</td>
<td>2.0</td>
</tr>
<tr>
<td>1</td>
<td>C</td>
<td>289</td>
<td>VAL</td>
<td>2.0</td>
</tr>
<tr>
<td>1</td>
<td>K</td>
<td>110</td>
<td>LYS</td>
<td>2.0</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>94</td>
<td>LYS</td>
<td>2.0</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>30</td>
<td>LEU</td>
<td>2.0</td>
</tr>
<tr>
<td>1</td>
<td>Q</td>
<td>278</td>
<td>ARG</td>
<td>2.0</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>199</td>
<td>LEU</td>
<td>2.0</td>
</tr>
<tr>
<td>1</td>
<td>G</td>
<td>211</td>
<td>PHE</td>
<td>2.0</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>150</td>
<td>TRP</td>
<td>2.0</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>112</td>
<td>GLN</td>
<td>2.0</td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>282</td>
<td>ALA</td>
<td>2.0</td>
</tr>
<tr>
<td>1</td>
<td>J</td>
<td>104</td>
<td>THR</td>
<td>2.0</td>
</tr>
<tr>
<td>1</td>
<td>J</td>
<td>196</td>
<td>PHE</td>
<td>2.0</td>
</tr>
<tr>
<td>1</td>
<td>H</td>
<td>158</td>
<td>MET</td>
<td>2.0</td>
</tr>
</tbody>
</table>

6.2 Non-standard residues in protein, DNA, RNA chains

There are no non-standard protein/DNA/RNA residues in this entry.

6.3 Carbohydrates

There are no carbohydrates in this entry.

6.4 Ligands

In the following table, the Atoms column lists the number of modelled atoms in the group and the number defined in the chemical component dictionary. The B-factors column lists the minimum, median, 95th percentile and maximum values of B factors of atoms in the group. The column labelled ‘Q< 0.9’ lists the number of atoms with occupancy less than 0.9.
<table>
<thead>
<tr>
<th>Mol</th>
<th>Type</th>
<th>Chain</th>
<th>Res</th>
<th>Atoms</th>
<th>RCC</th>
<th>RSR</th>
<th>B-factors(Å²)</th>
<th>Q&lt;0.9</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>SAH</td>
<td>R</td>
<td>301</td>
<td>26/26</td>
<td>0.54</td>
<td>0.42</td>
<td>118,121,122,123</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>SAH</td>
<td>N</td>
<td>301</td>
<td>26/26</td>
<td>0.69</td>
<td>0.29</td>
<td>105,107,108,108</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>SAH</td>
<td>B</td>
<td>302</td>
<td>26/26</td>
<td>0.71</td>
<td>0.25</td>
<td>105,107,108,108</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>SAH</td>
<td>H</td>
<td>301</td>
<td>26/26</td>
<td>0.78</td>
<td>0.29</td>
<td>98,102,105,106</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>SAH</td>
<td>J</td>
<td>301</td>
<td>26/26</td>
<td>0.86</td>
<td>0.22</td>
<td>88,89,91,91</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>SAH</td>
<td>K</td>
<td>301</td>
<td>26/26</td>
<td>0.88</td>
<td>0.20</td>
<td>75,79,80,81</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>SAH</td>
<td>P</td>
<td>301</td>
<td>26/26</td>
<td>0.88</td>
<td>0.22</td>
<td>72,74,75,75</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>SAH</td>
<td>L</td>
<td>301</td>
<td>26/26</td>
<td>0.91</td>
<td>0.26</td>
<td>85,87,89,89</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>SAH</td>
<td>O</td>
<td>301</td>
<td>26/26</td>
<td>0.91</td>
<td>0.21</td>
<td>80,82,83,83</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>SAH</td>
<td>G</td>
<td>301</td>
<td>26/26</td>
<td>0.93</td>
<td>0.19</td>
<td>74,75,77,77</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>SAH</td>
<td>B</td>
<td>301</td>
<td>26/26</td>
<td>0.94</td>
<td>0.20</td>
<td>49,51,52,53</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>SAH</td>
<td>Q</td>
<td>301</td>
<td>26/26</td>
<td>0.94</td>
<td>0.18</td>
<td>61,62,64,65</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>SAH</td>
<td>C</td>
<td>301</td>
<td>26/26</td>
<td>0.94</td>
<td>0.19</td>
<td>61,63,64,64</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>SAH</td>
<td>D</td>
<td>301</td>
<td>26/26</td>
<td>0.95</td>
<td>0.15</td>
<td>57,58,59,59</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>SAH</td>
<td>M</td>
<td>301</td>
<td>26/26</td>
<td>0.96</td>
<td>0.18</td>
<td>57,61,62,62</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>SAH</td>
<td>E</td>
<td>301</td>
<td>26/26</td>
<td>0.97</td>
<td>0.18</td>
<td>48,49,50,50</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>SAH</td>
<td>F</td>
<td>301</td>
<td>26/26</td>
<td>0.98</td>
<td>0.17</td>
<td>34,35,36,37</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>SAH</td>
<td>A</td>
<td>301</td>
<td>26/26</td>
<td>0.98</td>
<td>0.15</td>
<td>36,38,39,39</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>SAH</td>
<td>I</td>
<td>301</td>
<td>26/26</td>
<td>0.98</td>
<td>0.15</td>
<td>34,36,37,38</td>
<td>0</td>
</tr>
</tbody>
</table>

### 6.5 Other polymers

There are no such residues in this entry.